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THE
AMERICAN
GARDENER'S MAGAZINE,
AND
REGISTER
OF
USEFUL DISCOVERIES AND IMPROVEMENTS IN HORTICULTURE AND RURAL AFFAIRS.

CONDUCTED

By C. M. HOVEY and P. B. HOVEY, Jr.

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PREFACE.

Our labors for the First Volume having terminated, it may not here be unappropriate to take a retrospective view of the past year, and see what benefits have already resulted during the short time the Magazine has been established.

To record the progressive advancements of, and improvements in, the science of horticulture, in all its branches, has been our first and principal purpose. To do this, we, in the commencement of our labors, procured the assistance of many of our friends, who are interested in gardening throughout the country, knowing that our own humble efforts would avail but little compared with what would result from a co-operation of all.

How far we have fulfilled this, and other objects stated in our prospectus, a single glance at the contents will decide. A rich fund of information has been gathered together, and many of the contributions are from our first practical men. It cannot but be gratifying to every lover of gardening, to perceive that we possess gardeners, who know how to write as well as practise, and who can thus impart their valuable knowledge to the public; and it is in this view that we consider our Magazine has been eminently advantageous to the advancement and spread of a taste for this pursuit;—by creating a greater love for reading; by reading, to acquire information which gives greater exercise to the mind, and a desire for other and higher sources of gratification—the possession of the most interesting objects worthy of cultivation.

In this Volume, the cultivation of the grape vine—both in the garden, green-house and grapery, is fully given; select lists of pears and apples, important at the present time, for planting small gardens, by individuals who are well qualified for the purpose; the cultivation of many rare flowers, and the growth of some valuable vegetables. These are, however, but a few of the subjects treated of, and which constitute only a small part of the original contributions.

In the next Volume it is intended to give more engravings, particularly plans of some of the best green-houses, accompanied, perhaps, in some instances, with the expense attending the erection of the same. These, we anticipate, will be of great value not only to gentlemen who wish to build, but to all our readers. The *Original Communications* we intend shall be of the first character, and will treat of those subjects which are considered of the most importance, embracing every branch of horticulture. In the *Review* department we have promised aid, and such, we hope, as will enable us to do justice to any work we may have the pleasure of noticing. Under the head of *Miscellaneous Intelligence* will be collected together, notices of the progress of horticulture in England, France, Germany, &c.; and also all items of information which may be interesting to the lover of gardening. Great attention will be given to the literary character of the work.

We might enlarge upon the objects of our Magazine, and point out many benefits, which, we believe, it has been instrumental in bringing about ; but we have already extended our limits.

It is a source of the highest gratification to know that our zeal to disseminate a taste for gardening pursuits, has not been unattended with favorable results. Pursuing the study of Horticulture as much from inclination as from interest, it will be our greatest ambition to promote its advancenent, in a high degree ; and a consciousness that we are imparting knowledge and pleasure to any class of individuals, will cause us to continue our exertions with renewed vigor. To our friends who have so liberally favored us with communications, we return our humble, heartfelt, thanks; their kindness will long be remembered : we earnestly solicit them to continue their valuable assistance.

C. M. H.,
P. B. H., Jr.

Boston, *November*, 1835.

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CORRECTIONS.

BESIDES those enumerated in pp. 80. 284. 395. 435, are the annexed. There are a few botanical names which are misspelt; but the reader will supply the corrections without indicating them here.

In p. 13, line 4 from the bottom, for "Camelliæ," read "Camelleæ."

In p. 29, line 7 from the bottom, for "Erythina," read "Erythrina."

In p. 30, line 13 from the top, for "Pittospórus," read "Pittosporums;" line 7 from the bottom, for "lophanta," read "lophantha;" this error occurs several times throughout the volume, which should be corrected.

In p. 31, line 19 from the bottom, for "being," which occurs twice in the same line, read "having been."

In p. 42, line 6 from the bottom, for "diameter," read "width."

In p. 56, line 28 from the bottom, for "varieties," read "species;" this error also occurs three or four times in this and the following page.

In p. 68, line 27 from the top, for "heat," read "heated;" the same error occurs several times in the following six pages.

In p. 70, line 15 from the top, for "Mr. McLellan," read "Mr. McLennan;" the error occurs once or twice on the same page.

In p. 72, line 6 from the bottom, for "Strelitzea," read "Strelitzia;" occurs in one or two other places in the first part of the volume.

In p. 74, line 2 from the top, for "Enikánthus," read "Enkiánthus;" line 9 from the top, for "Teleópea speocissima," read "Telópea speciosissima;" same line, for "diccussàta," read "decussàta."

In p. 80, line 23 from the top, for "Pénstemons," read "Péntstemons;" this error occurs several times in the volume, which should be so corrected.

In. p. 338, line 8 from the top, for "Chysanthemums," read "Chrysanthemums;" this error occurs in this and the following eight pages several times.

In p. 166, line 9 from the bottom, for "species," read "specimens."

In p. 182, line 11 from the top, for "scàber," read "scàbra;" should be corrected several times in the volume.

In p. 259, between lines 19 and 20 from the top, add "Monocotyledonous plants."

In p. 331, line 4 from the bottom, for "Erythrinum," read "Erythrònium;" line 20 from the bottom, for "anemoneoedes," read "anemoneoides."

In p. 341, line 24 from the bottom, for "Hartford," read "Connecticut."

In p. 351, line 6 from the bottom, for "its," read "their."

In p. 364, line 22 from the bottom, for "Woolnary," read "Woolmans."

In p. 370, line 4 from the top, for "stout," read "short;" line 14, omit the word "terminal;" line 13 from the bottom, for "arrow-like," read "yarrow-like;" line 11, for "having an apricot leaf appearance," read and "resembling the leaves of the double flowering almond."

In p. 375, line 15 from the top, for "Fall," read "Tall."

In p. 376, line 21 from the top, for "genus," read "species;" line 29, for "extensively," read "extremely;" line 10 from the bottom, for "scardate," read "cordate."

THE
AMERICAN
GARDENER'S MAGAZINE.

JANUARY, 1835.

INTRODUCTION.

The important benefits which are derived from Gardening, and the agreeableness and pleasure associated with its pursuit, are so well known and generally acknowledged, that a recapitulation of them would be almost superfluous. Horticulture, among all other sciences which have ever occupied the attention of man, has held a distinguished rank; affording in its productions all the necessities and comforts of existence; cheering the frugal board of the cottager with wholesome vegetables, and decorating the tables of the affluent with all the delicacies and luxuries of life. It was the first art of man, in his primeval state, to till the ground to gain nourishment, subsistence, and supply wants; from these wants arose desires, and from these desires all the refined enjoyments and pleasures of society may be attributed. It is not confined to any one portion or class of men, who practice it in regard to profit alone, but it is the favorite amusement of individuals in every civilized part of the globe. Its spirit has diffused itself through all grades of society:—to the merchant, it is a source from which his mind is relieved from the bustle and confusion attendant upon a life of business, confined to a crowded city; to the sedentary, a source of healthy and strengthening exercise; to the gentleman, a favorite recreation, in which, while devoting his leisure moments, he will find endless gratification and delight, in its varied and ever varying character.

In presenting to the public a periodical Magazine on Gardening, it may be expected that we should particularize the various subjects which will be embraced in the work. Without occupying too much time and attention, and with the indulgence of our readers, we offer a few introductory remarks.

The nature of the Magazine, we premise, is clearly expressed in the title; it will be the principal purpose of the Conductors, and they will use their utmost endeavors, to present their readers with Original Communications on Horticulture, Floriculture, Botany, and Rural Affairs;—Selections, such as they think will afford useful and valuable information, from foreign and domestic works of distinguished reputation,—Miscellaneous Notices, &c.,—to promote and disseminate a taste for the art among all classes of society, and to offer such observations as will direct the attention of those who have not impartially considered the subject, to its interest, value and importance.

The very vast improvements which have been made in Horticulture, within a few years, in this country, are principally owing to the establishment of the various Horticultural Societies throughout many of the States. With their rise and progress, a new impulse was given to those who had engaged in its pleasing pursuits. An interchange of feelings and sentiments infused new zeal, and excited those who had hitherto pursued it rather as a solitary than a social amusement. The spirit of emulation and improvement, caused by the combined efforts of these societies, has produced what years of individual exertion alone could not achieve. An intercourse has been opened, and flattering attentions received, from similar societies in Great Britain and on the Continent; thus affording facilities for the accumulation of important information, a knowledge of the useful productions of all nations, and for the introduction of plants, valuable or ornamental, from all quarters of the globe.

That the taste for Horticulture has much more rapidly disseminated itself through the public mind, than a corresponding knowledge of skill necessary for the cultivation and management of its objects, is too apparent to insist upon. The natural love of plants has led to the love of those choice; from those choice, to those rare, tender exotics have been introduced, which require careful attention, delicate treatment, and the most vigilant skill to insure success in their cultivation. New and choice fruits have been planted in the place of those less deserving of cultivation. Elegant ornamental shrubs have been added to our already extensive stock; and beautiful flowers, tender and hardy, have increased the interest and splendor of the green-house and parlor, during our dreary winters, and added to the enjoyment of the pleasure-garden throughout our brilliant summers. In the construction of buildings and edifices for the reception of exotic plants, more attention is given to the loftiness and elegance of external structure than heretofore; and improvements introduced, in the internal arrangements, by which greater security is given to healthy vegetation, and expenses attending their management greatly reduced.

Horticulture, like every art, is founded upon principles which will not admit of its being pursued with never-failing success, if a reliance be placed upon theoretical knowledge alone; nor will assurance from disappointments be secured, if theory be thrown aside, and practices followed because they once proved true, or may have been attended with occasional good results. It is only by the most careful and persevering attention, with unremitting industry and patience, deducing theory to the rules of practice, that ultimately successful operations can be permanently established. Principles may be acquired, and perhaps better understood, by a long course of experience alone,—and this may be the natural method of study;—but the science, complete as it now is, admits of being easier attained than by a series of years of experiments. Many are, however, too unwilling to mark out a new course, rather pursuing the same beaten track for years, regarding every new method or invention as an innovation of former rights, yet astonished why others, who apparently have no greater advantages, are distinguished for their constant success.

To keep pace with the rapid modern improvements, and to fill a place much wanting,—though, in its near relations, useful information is continually increasing and circulating by other periodicals,—will be the object of the Gardener's Magazine. Whatever relates to Horticulture, and its kindred branches, it will be our constant aim to lay before our readers. To put amateurs and gardeners, residing distant from each other, upon an equal chance of obtaining information, in respect to all the various nursery establishments and gardens throughout the country. To gather such notices of new and valuable fruits, and choice and rare plants, which may be introduced, that they may become immediately known to all who are desirous of obtaining them. This, we consider, will be one of the most important and decidedly interesting objects of the work. It is many years before some plants become generally known and cultivated, for no other reason than that there is no medium through which such information can be given. But of what value is a newly introduced fruit, or rare flower, if the richness and excellence of the one, or the elegance and beauty of the other, are to remain known only to one or a few individuals? Every new fruit or flower, deserving of cultivation, should be distributed as speedily as possible, that the public may enjoy the benefits of such productions.

To furnish our readers with particular notices, if not with exact descriptions, of everything new in vegetable culture, by frequently visiting all the private residences, nursery and market gardens, we hope to contribute greatly to the interest of our Magazine. While we are recording our own progress and success, the advancement of gardening, and the introduction of plants into the European and Continental gardens will not escape our observation. Incidental or partial notices have only as yet appeared, and these so tardily, that they have lost much of their interest. The number of periodicals which are devoted to the sciences of Horticulture and Botany, in Great Britain alone, is astonishing; embracing, among others, elegant and costly works, with beautiful colored plates of fruits and flowers, executed by the most skilful artists, and already numbering many volumes. Their practical works, with those of France, contain the most valuable and desirable information, of real improvements and discoveries, connected with the cultivation and propagation of plants. A great portion of these are very expensive, which precludes the possessing of them by many who would be glad to profit by their advice. To them, however, we shall frequently give our attention, and select such useful and entertaining matter as will give additional value to our pages.

One of the most decidedly important subjects, and one which we think cannot be too often noticed, is the diffusion of such information as will tend to eradicate the prejudices which exist among many persons, in relation to the introduction and cultivation of new varieties of fruits. There are some, who, in their zeal and eagerness to enlarge and enrich their collection, go too far; and, with a greater desire for novelty than for quality, often set aside good old kinds to make room for those new, or, at least, with new names: others, with a determination not to adopt any measures for their introduction, still adhere to their own opinions, regardless of all that has been urged in their favor, unwilling to hazard the least risk of exterminating an old variety, for a new and choice one. These may both, however, be considered as the two extremes, and not either of them often pursued. Yet there are many who concur too readily with the opinions of the latter course, and urge, as one reason, the high prices which are affixed to the new varieties, and the numerous opinions which exist, even among practical and scientific men, in regard to their good qualities and celebrated character. When the sorts become generally known, such prejudices will undoubtedly be done away with; but it will be long ere they will be spread and cultivated more extensively, in the interior; especially, when there is not an opportunity of their value being more certainly ascertained. There are many gardens which abound with old and worn-out varieties of fruit, but which, if the owners were aware of the facilities, might be engrafted or renovated, so as to supply them with all those that are rich and luscious.

The raising of new varieties of various kinds of fruits, from seeds, is now attracting great attention. And the time is probably not far distant, when we shall be supplied with choice fruits, the results of the experiments pursued by the amateurs and scientific gardeners of our own country. It would be indeed strange, that with the energy and zeal characteristic of the American citizen, we should suffer our gardens alone to be stocked with foreign productions; when our country, rich as it naturally is in horticulture and botany, and with a genial climate, highly favorable to the growth of every fruit, flower and vegetable, presents such facilities for originating new and improved varieties. Who would detect, in the delicious Seckle, the Heathcot, the Johonnot, or the Dix pears, the hard and stony fruits, growing spontaneously in our woods and fields, and which even animals, unless in a state of starvation, refuse to devour. But the hand of man has ameliorated even these to the rich fruits abounding in our gardens. Since the success has been made known which attended the experiments of the English and French horticulturists, in raising new fruits by cross-fertilization, there has constantly been annual accessions to our esteemed kinds; and if occasionally there has been attached to one variety too many synonymous terms, the fault has been counterbalanced by the value which all have been to the horticulturist. We shall use our exertions to obtain such communications as will impress upon the mind of the practical gardener the importance of more attention to the subject.

In the ornamental department of Gardening, there is room for many and great improvements. The immense number of indigenous trees, shrubs and plants, which are scattered so profusely throughout the woods and forests of the country, afford facilities for the beautifying and decoration of the pleasure-garden, which are too often overlooked. In the desire for exotics, many of which require constant care and attention, the humble flowers which adorn and enliven the appearance of the fields and pastures, the splendid and brilliant shrubs, and the lofty and noble trees, which add picturesque beauty and grandeur to our woodland scenery, seem to be too much neglected. If they had but rarity to recommend them, they would be sought after and procured, though attended with much difficulty and expense. Many plants introduced into our gardens, which have heretofore been considered as tender, have, by repeated trials, become so acclimated as to stand the rigors of our long and dreary winters; and every such addition to our hardy shrubs, should be viewed as an important and valuable acquisition. But while such attention is lavished upon them to acquire the desired end, it is almost forgotten that hundreds, of our own clime, vieing in beauty, if not far excelling these oriental productions, are blooming and shedding their lovely and spicy blossoms to the desert air.

While devoting our attention to the advancement of Horticulture, we shall not be unmindful of the important improvements which are continually made in Agriculture, the most valuable of all arts. It will not be our purpose to discuss it in its practical character of farming, etc., as these are now so ably and beneficially treated, in many excellent works, almost exclusively devoted to the subject; but to glean such information as may be interesting, and to notice its useful operations and utility, as connected with the comforts and enjoyments of all classes of society, domestic economy, and rural affairs.

We pass over the two subjects of Botany and Landscape Gardening, though of almost paramount importance to those we have mentioned, more particularly, because of the impossibility to do them full justice, in the short space of a few introductory remarks; but we hope to favor our readers with communications in relation to their more general study and practice. The science of Botany is almost universally acknowledged to be one of great utility. Botanists have been attached to expeditions and surveys of different countries, and have enriched the collections of plants by the many rare and choice specimens which they have discovered. In Great Britain, the aid of government has been given to its pursuit; and by the wealth and exertions of private persons, it has acquired a higher state of perfection than in any other part of Europe. In this country, it has received the attention of many native individuals, who have highly distinguished themselves for their perseverance and exertions in botanical knowledge. Landscape Gardening has, as yet, received but little attention, and may be considered in its infancy. But we intend our Magazine shall embrace such selections and communications as will call the attention of owners of country residences to its practice, as a species of improvement, more grand, beautiful and refined, than any in which they can display wealth.

Having thus given some account of the objects of the American Gardener's Magazine, we leave our readers to judge how far our intentions have been fulfilled, by presenting them with the communications we have already received. We have had such assurances from our friends as to leave no doubt we shall be able to make each succeeding number of increasing interest: and we respectfully invite all who feel the want of a work like this, to encourage us by freely sending us communications. To the practical gardener the public look for information and instruction, in those minute things which escape general observation, and without which, the successful cultivation of many plants may be considered precarious. We sincerely hope no one will offer, as an excuse, his inability to become a contributor. With respect to ourselves, Gardening is a pursuit to which we have ever been zealously devoted, and in which we have ever felt a deep interest. We hope our humble efforts, in our new avocation, will not be unavailing, in disseminating a taste for Horticulture; and if our endeavors receive the approbation of a liberal public, we shall not fail to exert ourselves to merit a continuance of their support.

ORIGINAL COMMUNICATIONS.

Art. I. *On the Vine.*

By William Kenrick, Newton.

The vine is a native of the temperate regions. Its history is traced to a very ancient date in Persia. It is cultivated most extensively, for wine, in every part of Europe favorable to its growth. Also, in South Africa, and the African Isles of the Atlantic, and in Greece. It is also cultivated in Barbary and Egypt, and in all those parts of Asia which are possessed of a suitable climate; but not, however, so much for wine, its use being forbidden to the disciples of Mohammed. It does not flourish within the tropics; it may, indeed, grow there, but produces but little fruit, except in the mountainous elevations. Yet, in some tropical countries, as at Bombay, they give to their vines an artificial winter, by arresting at once their growth, that the wood may thus be ripened, and become productive.

The vine is extremely long-lived: it is stated that some have lived six hundred years; and that there are vines in Burgundy four hundred years old. The native vines of America, as of other countries, ascend to the summits of the highest trees of the forest; growing, sometimes, of enormous dimensions. And vine timber is stated to be of very great durability: of this fact, the long life to which the vine tree will attain, might alone be deemed sufficient evidence. It is too valuable to be applied to common purposes, its use being confined almost exclusively to furniture, statues, etc.

The grape has been highly prized, in all ages, as a delicious and wholesome dessert fruit. They are used as preserves and in cookery. Sugar is also made from the juice of the grape, good, but coarse grained; and the unfermented juice, when boiled to the consistence of honey, is esteemed a delicious article of food, being used, both in Europe and in the Mohammedan countries, either with or without sugar, as butter or honey is used.

Raisins are prepared from the matured fruit of the grape. The clusters, without being separated from the branches, are dipped in a ley of wood ashes, containing a small portion of sweet oil, and then dried by exposure to the sun. By another mode, though not so good, they are dried in a oven. Raisins are deemed a wholesome and nutritious food, when used in moderation. They are of extensive use, both for the dessert and in cookery.* A good wine may also be prepared from them.

The grapes which are exported from France and Spain, are packed in alternate layers of saw-dust, which has been thoroughly dried in an oven: and we are assured that grapes may be preserved a year, by being gathered in the afternoon of a dry day, and enclosed in a dry, tight cask, being laid singly and in layers, between alternate layers of thoroughly kiln-dried bran.

Sherbet constitutes a cooling and wholesome drink of the Mohammedans. It consists of the unfermented juice of the grape, mixed with water, sugar and spices.

The unfermented juice of the grape, which constitutes the essential element of wine, are 1st, water; 2d, sugar; 3d, tartaric acid; 4th, mucilage; each in different proportions. But after fermentation, wine contains, by chemical analysis, 1st, water; 2d, alcohol; 3d, sugar; 4th, tartaric, carbonic and malic acids. It also contains tannin, a coloring matter, and a volatile oil.

Gross or watery wines are extremely difficult to preserve and manage. It is far otherwise with those which contain a suitable proportion of the essential elements; these being comparatively of very easy management. Where the elementary principles are deficient, they should be added at once, in the beginning, and before the fermentation has commenced.

In Modern France, sugar is now added, when its presence is essentially wanting; and vineyards which before would never make any, or but poor wine, are now, by this addition alone, rendered productive in good wine; and the sugar produced from the potato is now, it is said, much used for this purpose in that country; and for this use it seems to be peculiarly adapted, its taste being intermediate between the sugar of the cane and the sugar produced from the grape.

From a pound and a half of potato starch, one pound and a quarter of crystalline brown sugar has been obtained. And starch, according to Davy, is converted into sugar, by the very simple process of boiling in very diluted sulphuric acid. 100 parts of starch, 400 parts of water, and 1 part of sulphuric acid, by weight, are kept boiling for forty hours; the loss of water, by evaporation, being supplied by new quantities. The acid is to be neutralized, by lime, precisely as the acid which is contained in the juice of the sugar-cane is neutralized, and the sugar is crystallized by cooling.

The moderate use of good wine is deemed wholesome, especially to convalescents recovering from malignant fevers, and to those of debilitated habits, as it accelerates the circulation. On the other hand, its too liberal or immoderate use undermines the constitution, and lays the foundation of a train of diseases. It paralyses the mental faculties, and induces those disorders of body, which not uncommonly terminate in death.

The vine is propagated by layers, also by cuttings, which should be cut with two or three eyes, and cut close below the lowest eye, and set in a humid soil, with but a single eye above the surface; or is raised even from the cuttings of a single eye.

The vine requires a deep, light soil, and a warm exposition, to produce fruit of superior quality. In cold, moist, and strong soils, the fruit is gross and watery, and later in the season of its maturity.

The foreign as well as native vines succeed admirably in our cities: and especially so, when planted beneath pavements, and in the paved court-yards. Their growth, in such situations, becoming more moderate and regular, they are not so liable to suffer from excessive moisture, and the quality of the fruit becomes proportionably improved; the reflected heat of the sun from the pavement, augmenting both the size and the flavor, and hastening its maturity.

Vines trained to vertical walls, and growing in confined or humid situations, are often subject to mildew: and on the walls of this description, which face due south, the sun, during mid-summer, never shines till an advanced hour in the morning; and the benefits are never but partial, from the oblique rays of a sun which at noon-day are nearly vertical.

In our own latitude, or the latitude of Boston, where, during midsummer, the sun at mid-day is nearly at the zenith, an inclined plane, or roof, or wall, sloping, and literally facing the noon-day sun, will afford an exposition more favorable than vertical walls; or at that angle which will face the sun at the time when his rays are most needed, or towards the autumnal equinox. Over this, and at suitable distance, the trellis may be elevated; and upon this, the vines displayed, whether they arise at the foot of the plane, or are brought up from the distance of forty or fifty feet, by a single stem, from the roots below. In such a favored situation, they will receive the full benefit of the morning sun, and the more effectual advantage of the noon-day sun, both by his direct rays and by reflection. The excess of moisture, the nightly dews, and a stagnant atmosphere, the combined causes of mildew, will be dissipated by the morning sun, or by the direct influence of southerly winds, or by the indirect influences of southerly winds, in the eddies and counter-currents.

The inclined planes, or roofs, or walls of wooden structure, by being shaded with a vegetable covering, are liable to speedy decay. But this objection does not apply to those with a covering of slate; or to the cheap, enduring and admirable coverings which are now formed of *zinc*.

From the late experiments of Mr. James Macdonald, of Scotland, in his statement recorded by Mr. Loudon, it even appears that when the vines of the Black Hamburgh and the White Muscat of Alexandria, were trained at suitable distance above the sloping roofs of glass, and exposed to the open air, and to the direct rays of the sun, and to the heat caused by the rays of reflection, that the fruit ripened equally as well, and nearly as early, as did the fruit of those which were trained beneath its surface. And it is a well known fact, that at a certain angle of obliquity, the rays of the sun do not pass through common glass at all, or but partially, but are mostly reflected from its surface.

With respect to vineyard culture, and for *wine*, the American grapes have obtained a decided preference over the foreign varieties, by those who have tried both. William Kenrick.

Newton, Dec. 16, 1834.

Art. II. *Remarks on the Cultivation of the Grape Vine.*

By Pemberton.

It is not my intention to track the practical gardener, nor to write a treatise on the raising of the vine; but simply to record a few observations and experiments made while amusing myself in cultivating a few varieties in my own garden, in the open air: and this, I think, is the only method of understanding the successful management, and obtaining a true knowledge of growing to perfection, one of the most delicious and excellent fruits; and one which may be had, with little care and attention, by every family in the city or country.

In the first place, I do not approve of the practice of purchasing old plants, and of uncertain kinds, of the vine. I much prefer to procure cuttings of such as I am very confident are true to the name; for, if properly attended to, they will come into a bearing state almost as soon as those set out with roots. I take the cuttings and prepare them by pruning them to the length of eight or nine inches, leaving three eyes to each, put them down where I intend to have my standard vines, and mark the name on some kind of a label that will retain the same for as great a length of time as possible; when likely to become obliterated, I have it renewed. A new method of writing on zinc labels, with a chemical ink, has lately been discovered, obviating all the difficulties which have heretofore existed; they having the property of retaining the name for many years. I have lately tried them, and would highly recommend them. They may be had at any of the seed-stores.

I put two cuttings in each place; if they both grow, I remove one, so as not to have it interfere with the intended standard. They must be put rather deep in the ground, leaving only one eye (the third) above it, and rubbing off the others. In the fall of the year, the vine, after it has made its annual growth, if a foreign variety, should be laid down and protected with a little straw or leaves. The Isabella, and all native grapes, will bear the winter, unprotected, in all common seasons, if they are not pruned till February. In the latter part of February, or beginning of March, they should be pruned down to three eyes, cutting off within about an inch of a strong and prominent bud. When the vine pushes its shoots in the spring, and they have attained the height of eight or ten inches, select out the strongest one, (rubbing off all others) which should be trained to a single, strong stake, which will not be likely to be broken by the wind: it should be encouraged in its growth, as much as possible, by plucking off all useless side shoots every fortnight, so as to throw the whole strength into the main one, and regularly tying the vine to the stake. In the autumn, the vine will have made a fine shoot, six or eight feet in length, and of the thickness of nearly half an inch. They should be shortened to about four feet, and, upon the approach of winter, should again be laid down and covered with any light substance, so as to keep them from the sun. The object of protection is to prevent the circulation of the sap in the vine during sunshine, and at night from closing up the pores by freezing. It is not the cold, as many imagine, that injures the vine, but the heat of the sun during the months of February, March and April; the warm days inducing the sap to flow into the buds very rapidly, and when in that state, freezing in cold nights, so as to burst or rupture the inner bark (or albumen), which is composed of small vessels, corresponding to the outer cuticle of the animal creation. If the vines could be kept entirely cold until April, no injury would occur to them, if they were not covered at all. I have put this to the test several times. But if the sun is suffered to shine on them during February and March, continually freezing and thawing, it is almost sure death to them.

In training vines, I greatly prefer a horizontal direction to any other. I also prefer to train them all one way, when convenient. Any method of training, however, provided it be done judiciously, will answer the same end. The trellis should run from south-east to north-west, so as not to have the morning sun on both sides of the vine. In training, leave the wood long on the north-east side, so as to shelter the grapes from the chilling east winds and morning sun, which, in my opinion, chills the fruit, and weakens both the wood and fruit, and by that means, brings on the mildew from debility. On the south-west, I prune off all the laterals, tendrils, or useless wood, so that by this, a vinous hedge will be formed, that protects the fruit from the north-east, and gives a warm, soft heat on the south-west. This method I have tried for several years, and have never failed in getting a good crop, while all other methods and positions have failed. Grapes are injured materially by late prunings, when the wood is scarcely done growing; it weakens the vine, by destroying the return of the sap, and the fruit stops growing, becomes soft, sour, and wholly unfit for use. Vines ought not to be pruned much after July; the fruit needs the protection of the leaves as the nights grow colder; they were formed for that purpose, and act as a covering to modify the air, keep off the cold at night, the scorching rays of the sun during the day, and to protect the fruit from heavy rains and other injuries.

These are a very few hasty remarks, which I have thrown together: if you deem them worthy an insertion in your forthcoming magazine, you are at liberty to make use of them. In a future number, I shall continue them further. Yours, PEMBERTON.

Boston, Dec. 16, 1834.

ART. III. *On the Preservation and Cultivation of the indigenous Plants of North America.* By J. E. TESCHEMACHER, Esq.

MANY of the plants which decorate the woods and fields of this region, are with justice considered the pride and ornament of the pleasure-garden in Europe, and only require to be known, in order to rise to the same estimation here. It is to be remarked, also, that plants of difficult cultivation, like the more timid wild animals, seem to recede as civilization and agriculture advance; so that many, which no doubt grew plentifully in this neighborhood, are now only to be found in sequestered spots, and at considerable distances.

A short notice of a few of the most showy, may not be uninteresting to many of your readers; and may, perhaps, introduce into notice plants, the pursuit and discovery of which, in their native soil and situations, have afforded, to the writer of this, unalloyed pleasure.

At the head of the list I would place

Lobelia cardinalis, the Cardinal flower, the brilliant scarlet spikes of which ornament the sides of brooks and watery places, in July and August. Although these are its native habitats, yet cultivation has shown that constant moisture is not absolutely necessary, and that it will flourish in almost any part of the garden, if not too arid. It is easily propagated by division of the root, either after flowering or very early in the spring. In Europe, where the taste prevails of planting flowers in masses, the splendid color of this plant causes it to be thus abundantly employed.

Gerardia—three varieties of yellow, and three of rose color. I have placed this plant second on the list, with a view of drawing the attention of experimental horticulturists to its habits, which are singular and render it very difficult of cultivation. Its great beauty and elegance would, however, amply repay any trouble that might be taken to make it common in our gardens. It grows in woods in the vicinity of Brighton and Dorchester; and all three varieties of the yellow, which are very distinct in foliage, are abundantly found in the woods about Hingham. On lacerating very slightly any part of the plant, either stem, leaf or flower, it immediately turns black and is destroyed. I imagine that the tender fibrils and spongioles of the root partake of this great susceptibility, probably have it in a higher degree; hence any attempts at removal, and I have made above twenty, at almost every period of the year, prove abortive, from the injury sustained by the vessels on which the life of the plants depend. I have hitherto failed in raising plants from seed, but this has no doubt been from want of proper care. The plant is rare in Europe. It is often only necessary to state difficulties in order to engage persons in undertaking to overcome them. I shall be happy if this be the result with this charming plant, which flowers from August to September.

The third and last plant I shall name on this occasion is

Bartsia Coccinea, or the Scarlet Bartsia. The great beauty of this plant does not consist in the flower, which is inconspicuous, but in the bright orange-scarlet color of the upper part of the leaves, (or bractes) from the axil of which the flower proceeds. It is an annual, flowering in April and May, hence a desirable plant, and in a mass presents a most splendid appearance. The nearest situation I know where it is to be found, is in the vicinity of Dedham.—[It may be found near Fresh Pond, Watertown.—*Conds.*]

In a future paper, I may probably offer some remarks on the cultivation of the orchideous plants which are found in this vicinity, and which, when better known, cannot fail to arrest the attention of every lover of horticulture.

Boston, Dec. 6, 1834. Yours, J. E. TESCHEMACHER.

WE are highly gratified to find that the opinions expressed by us, in our introductory remarks, in relation to the elegance and beauty of the indigenous plants of our country, are the same as those of so enthusiastic an amateur and lover of botany, as Mr. Teschemacher. He has collected specimens of nearly all the wild plants around Boston; and no one, we are assured, is better able to describe their beauties, the situations where they may be found, or the most successful method of their cultivation when removed from their native habitats to the pleasure-garden. Gerardia pedicularis grows in abundance at Mount Auburn, Cambridge, flowering during July and August.—*Conds.*

ART. IV. *Observations on the Camellia and its Varieties, with some Account of its Introduction into Great Britain and this Country.* By M. P. WILDER, Esq.

IN the whole range of splendid exotics which have been introduced into this country, there are few, if any, that combine so much elegance and beauty, either as it regards the dark, shining *evergreen* of their foliage, or the dazzling brilliancy of their flowers, as those constituting the natural order Camélliæ.

At all seasons of the year it is unrivalled for the richness of its foliage, but in the dreary months of winter, when almost all the attractions of the floral kingdom are wrapt in slumber, it stands forth with peculiar splendor, displaying its showy blossoms of varied hue, and reigning at once the pride and glory of the green-house.

It is not known that they are indigenous to any other countries than China, the East Indies, and the islands of Japan.

The order is divided by botanists into two genera, Thèa and Caméllia; the latter being named in honor of *George Joseph Kamel*, and the former the plant which produces our tea, so universally known and used as a luxury, and in a commercial point of view, of vast importance; there having been, during nine months of the past year, more than two hundred and twenty thousand chests, or upwards of sixteen millions of pounds, imported into the United States alone.

There exists much difference of opinion among botanists, as to the order; some connecting Thèa with Caméllia, and others separating them. Linnæus considered them as two distinct genera, while Professor Lindley doubts the propriety of such division, and in his Introduction to the Natural System of Botany, (London, 8vo. 1832) has arranged both Thèa and Caméllia, under the natural order Ternstrœmiàcæ. The genus Thèa is divided into two species, Thèa viridis, the green, and Thèa bohèa, the black tea. The genus Caméllia is by Loudon, in his *Hortus Britannicus*, divided into six species, viz. Caméllia euroyìdes, oleìfera, Kìssi, Sasánqua reticulàta and japónica. Caméllia euroyìdes, being considered the connecting link between the two genera, Thèa and Caméllia, and closely allied to the Thèas; and Caméllia japónica, the type of the genus, and from which species has originated almost, if not all, of the double varieties now extant. There are, however, two other doubtful species, viz. Caméllia axillàris, of Dr. Sims, and Caméllia Drupifèra, of *Loureiro*. Caméllia axillàris being described, by the Messrs. Baumann, in their "Camellias de Bollwiller," (France, folio, 1833–34) a work of great merit, as belonging to the genus Gordònia; and in Loudon's *Hortus Britannicus*, as Polyspora axillàris, both of which are arranged under the natural order Ternstrœmiàceæ. Caméllia Drupifèra has not yet been imported into Great Britain or this country, and is thus spoken of in Chandler & Booth's Illustrations of the Caméllia:—" Judging from *Loureiro's* description, we think it a very doubtful species, and apparently distinct from Caméllia."

The Caméllia japónica, or the old Single Red, was first introduced into Great Britain about the year 1739, and for more than half a century remained a very scarce plant; and we may infer, but little known, not being mentioned in the eighth edition of Miller's Dictionary, published in 1768. Neither do we hear of any farther importations into the kingdom, until 1792, when the old Double White and Double Striped were brought out, followed, in 1794, by the Double Red.

It was introduced into the United States about the commencement of the present century. The most particular information I have on the subject, is from M. Floy, Esq., of New York, who informs me that he brought over with him, from England, in July, 1800, a plant of the Double White, for John Stevens, Esq., of Hoboken, New Jersey, who had two or three years previously imported the Single Red. The precise time of its introduction into New England is not known; but it must have been soon after, as in 1806, John Prince, Esq. received of the late Joseph Barrell, of Charlestown, a small plant of the Double White.

The Caméllia japónica became now more generally known and admired; and between this time and 1812, accessions were made, by importations from China, into Great Britain, of the Lady Hume's Blush, anemòneflora, myrtifòlia, atrorùbens, Pompònia, pæoniflòra and most of what are now called common varieties. Since 1812, the importations into England have been small, compared with the number of seedling varieties, which have been raised by cross-impregnation. The first seedling exhibited to the London Horticultural Society, was presented by Mr. Ross, of Stoke Newington, in 1824, and was considered so much of a curiosity, that a medal was awarded him for his success, and is the Caméllia now known as Caméllia japónica Róssi. Since which, there have been a great number of seedling varieties raised, not only in England, but in France, Germany, and some few in the United States. So well is the art now understood, that a writer, in a late tour on the continent, observes, that there are large houses, in the vicinity of Ghent, devoted entirely to Camellias, with extensive collections not yet named. Indeed, there is no end to the seedlings that may be raised by cross-impregnation, and the day is not far distant, when the Caméllia japónica will rival the far famed Rose, in the number of its varieties.

There have been, from time to time, numerous exhibitions of new kinds at the meetings of the London Horticultural Society, and to which the Messrs. Chandler, of the Vauxhall nursery, have been large contributors; having shown, of their own raising, within a few years, eleven varieties, of first rate excellence. Mr. Press, of Hornsey, has also produced several of unparalleled beauty; and his name will be long associated with the Eclipse, invíncible, and Rose of the World. In France, great success has been realized in raising seedlings, if we may judge by the catalogues, some of them enumerating more than two hundred varieties of the Caméllia japónica.

The Caméllia will succeed tolerably well in any good, rich soil. But that more generally used at the present day, in England, is composed of one part peat, or bog earth, and two parts a strong yellow loam. The compost I have used, and in which my Camellias have grown beyond my most sanguine expectations, consists of two parts peat, two parts rich maiden loam, from an old pasture, and one part each of leaf soil and sand; the whole of which should be well mixed, and turned over several times before using, but not sifted. Should it be desirable to increase the growth rapidly, a larger proportion of peat may be used; but in this compost they will not be so prolific in their flower buds.

The best season for shifting the plants is about the first of March; and which should be done by turning them out of the pots, carefully pricking, with a sharp stick, a little of the soil from the old ball, and repotting them in a pot a size larger than the one from which they were removed; especial care being taken not to injure the young fibres of the roots, and also to give the pots good drainage. There are various methods of increasing the Caméllia, such as by seeds, layers, inarching, grafting, budding and cuttings. The surest and most expeditious of which is by inarching, aud should be performed early in March, just before the plants commence making their spring growth, in the following manner:—Select a healthy young plant, of the Single Red, or any free growing variety, as near the size of the scion you intend to affix to it as possible; next, find a smooth place, and free from leaves in both, and adjust the plants so that they may approach each other at the point desired; then, pare away the half of either stock, fitting them together so exactly, that the inner rinds of both the barks may meet; bind them firmly together with bass matting, or coarse woollen yarn; cover the wounded parts with a coating of clay, and over this another of moss, to exclude the air; for on this, I have found, depends in a great measure the success of the operation. In ten or twelve weeks the inarching may be cut from the parent plant, and the union, if ever, will have taken place; at which time, the stock must be cut down to where the parts unite, and the plants, for a few days placed in a close frame.

Grafting or budding are seldom resorted to in this country or elsewhere, and never except to increase new and high cost varieties; the process being at best but a tedious one, requiring a long time to make good plants.

The increasing by layers is not at all convenient, as the plant must be placed in a frame for the purpose, and protected from the frost during the winter, it requiring more than one season for them to root sufficiently to be separated from the stool. The Camèllia may be grown from cuttings, the Single Red and Middlemist being the easiest to strike, and the Double White and Myrtle-leaved the most difficult; but the plants procured in this manner are much more beautiful in their shape, and prolific in their blossoms. As an example, I might mention a Double White, raised about fifteen years since, from a cutting, by the late lamented Dr. Dixwell, of this city, upon which I counted, the last season, more than two hundred, and the present, more than three hundred flower buds. Cuttings may be put in at any season of the year, when the plants are not in a growing state; but the best time is in the autumn, when the young wood is becoming ripe, and should be performed in the following manner:—Cut them smoothly across at the joint, between the old and new wood, and plant them firmly in pots, well drained, of pure river sand; covering them with bell-glasses, keeping them moderately moist, and placing them in the shade. In from four to six months, they usually commence taking root, at which time they will be materially assisted in their growth by being placed in a mild hot-bed. When it is considered that they have sufficient roots, which will probably be in about one year, they may be repotted, singly, into small pots, giving them the compost used for established plants.

The Camèllia may be easily made to produce seed, but rarely without the aid of artificial impregnation. When it is ripe, which will be in October or November, it should be sown in small pots, placed in the green-house, and kept moderately moist during the winter. In the spring, the plants will be up, and the following autumn they may be separated, with small balls of earth, and potted in the usual manner.

Having, gentlemen, completed the observations intended for this communication, I may, if leisure should permit, offer some further remarks on the treatment of this beautiful genus, together with a brief description of such named varieties as are known to be worthy of cultivation. Yours, M. P. Wilder.

Boston, Dec. 16, 1834.

If our Magazine contained only the above communication from Mr. Wilder, we should then consider it as worth double its stated price. The Camellia has now become so popular a flower, that no collection of plants can be called perfect unless they contain some of its choice and beautiful varieties. We visited most of the gardens around New York, last spring, with the intention of becoming more acquainted with this favorite flower. Among others, were those of Messrs. Prince, Hogg, Floy and Harrison; the two latter gentlemen have raised many splendid varieties; indeed, some of them are held at very high prices in the catalogues of the London nurserymen. Mr. Floy has raised one, which we observed in bloom, that as far excels all the plants, descriptions or plates of any Camellias we have ever seen, as can be imagined; he has named it Floyii. Mr. Harrison has also raised a lovely Double White, which almost equals the old White; he has also raised many others. Among all their numerous varieties, we observed none which surpassed, in the beauty and health of the plants, the elegance of their rich, dark green, shining foliage, or the splendor of their magnificent flowers, those of Mr. Wilder. He has, we believe, nearly one hundred varieties, some of which are of late introduction, and are very rare in European collections. Many of these will produce their blossoms this winter, when our readers may expect from him a description of them. We presume many recollect the plant of Camellia Chandlerii, one of the finest kinds, which Mr. Wilder presented at the Horticultural Society's room, last season, with other varieties. Those who do, will not forget its gorgeous appearance. The above are the results of Mr. Wilder's experience, and we can testify to the excellence of his practice.—*Conds.*

Art. V. *On the History and Cultivation of the Viola tricolor, Pansy violet, or Heart's-ease.* By S. Walker.

> "The daughters of the flood have search'd the mead
> For violets pale, and cropped the poppy's head;
> *Pansies* to please the sight, and cassia sweet to smell."—*Dryden.*

The cultivation of flowers has been the care of the tasteful, in every age and in every climate. While it affords an innocent and interesting occupation for the young, the gay, and the happy, it may be resorted to with the greatest advantage, as a solace under the perplexities and troubles of life.

In the warm and balmy breezes which are wafted over the plains of Persia, and the still farther East, the youths and maidens of those climes, assisted by their poets, invented a language of flowers, expressive of every emotion of the heart, and spoke every shade of affection, from the first spark of passion to the brightest kindling of love. Our distinguished poet, Percival, has noticed this most beautifully in one of his poems:—

> "In eastern lands they talk in flowers,
> And they tell in a garland their loves and cares;
> Each blossom that blooms in their garden bowers
> On its leaves a mystic language bears."

It would be delightful to wander long in Nature's garden of flowers; but the cultivator, perhaps, should never generalize until his labor is over, but should take special care of each individual plant as it comes under his hand, to be cherished by his care and skill. This, however, is a hard rule, and in a work of taste may, perhaps, be broken with forgiveness.

I ask the reader,—if he has ever been delighted by a *rose of Sharon*, or stopped to gaze on a *lily of the valley*,—to view with me that little, delicate flower, the tricolored violet, which, by many English authors, is called the *pansy*, or *heart's-ease*. The history of this flower goes back to the days of fable; and, what is most extraordinary, it has never been lost sight of in the revolutions of taste and attachments, so common in respect to the productions of the flower-garden. Some florists trace the name and origin of this flower to Io, daughter of Midas, who, as the early poets say, was changed by Diana, the protector of chastity, to a *violet*, to hide her from Apollo, who had become enamored of this earth-born beauty. It is a lovely allegory; for this modest blossom, after many centuries have passed away, still retains the bashful timidity of the nymph, partially concealing itself in its own foliage and that of other neighboring shrubs and plants, and shrinking from the gaze of the Sun, in his vernal and autumnal search for his long-lost Io, the object of his love.

In the poetry of the Greeks, and in all their works of taste, upon natural scenery, they embroider their productions with some allusion to this lovely flower. In the Floral Games, of the Romans, the violet was the *beau-ideal* of Flora, as the prize consisted of a *golden violet*.

That great master, as well as lover of nature, the Bard of Avon, has mingled the perfume of this flower with the sweet and delicate thoughts of the fair Ophelia, who, in her morbid state of sensibility, when Reason was shaken on her throne by Grief, "*turned everything to prettyness.*" She had been well instructed in the language of flowers, and makes some beautiful discriminations between the different kinds of violets, even in that state of mind. One species, it seems, was "*dedicate*" to love, meaning the passion of youthful hearts; and the other, to that feeling of reverence and affection which the child entertains for a parent or benefactor:—

> "*Oph.*—There's rosemary, that's for remembrance;
> Pray you, love, remember; and there is *pansies*,
> That's for thoughts.
> *Laer.*—A document in madness; thoughts and
> Remembrance fitted.
> *Oph.*—There's fennel for you, and columbines;—
> There's rue for you; and here's some for me;—
> We may call it herb of grace o'Sundays;—
> You may wear your rue with a difference.—
> There's a daisy:—I would give you some
> *Violets*; but they withered all *when my father died*."

The immortal Milton, who saw the worlds beyond us "with an angel's ken," and was familiar with every maze of science; who described with equal accuracy a constellation or a flower, has also made some distinction in the violets:—

> "———flowers were the couch,
> *Pansies*, and *violets*, and asphodel,
> And hyacinths, earth's freshest, softest lap."

The bard, who saw all things as Nature made them, has carpeted the bowers of paradise with the richest and sweetest flowers, among which the *violet* is first named:—

> "Thus talking, hand in hand, alone they passed
> On to their blissful bower; it was a place
> Chosen by the sov'reign Planter, when he framed
> All things to man's delightful use; the roof,
> Of thickest covert, was interwoven shade,
> Laurel and myrtle, and what higher grew
> Of firm and fragrant leaf: on either side
> Acanthus, and each odorous bushy shrub,
> Fenced up the verdant wall: each beauteous flower,
> Iris all hues, roses, and jessamine,
> Reared high their flourished heads between, and wrought
> Mosaic: underfoot the *violet*,
> Crocus, and hyacinth, with rich inlay
> Broidered the ground, more colored than with stone
> Of costliest emblem."

The generic term, *violet*, is derived from the Romans, yet the tri-colored violet has, perhaps, alone received the English names of *pansy* and *heart's-ease*. By modern florists, this beautiful flower is called the *viola grandiflora*, or the *great-flowered pansy violet*; and not unfrequently, of late, by way of great distinction, it has been called "the *florist's flower*." There are now, in the gardens in England, more than three hundred varieties of this plant, and the cultivators are every year repaid for their attention to this little gem of their love, by new varieties. Some beautiful ones have been exhibited in this country, the largest of which is the *purpurea*. It has been suggested, with much propriety, that this variety should be called *unimaculata*, as the petals are entirely purple, with the exception of the eye of the flower, which is small, and of a bright yellow. Other varieties, from tricolor to pure yellow, and from nearly black to white, are to be found in some collections in this vicinity.

This violet should have but one name, *"heart's-ease;"* for its cultivation delights the heart of the florist, if he has any love of nature in him. It blooms while "the coming frosts of later autumn" have put most other plants in the garden to sleep for the winter; it remains, as if unwilling to leave the sight of man; and sometimes, in a moderate winter, it is seen, partially covered with snow, with buds ready formed to usher in "young spring." The appearance of this flower keeps alive the hopes of the cultivator, and as he turns his eye, for a moment, from his favorite violet, to look for the *crocus*, with its "cloth of gold;" and the *anemòne hepática*, clothed in its white, pink or blue mantle, he is led at once to exclaim, with a bosom heaving with joy, "summer is coming, cold winter awa'." In some climates the violet is perpetually in flower, and there it received the name of *"forget-me-not."*

It is a fact, as before remarked, that the violet has never suffered from the caprice of fashion. Ever since it sprang from the bosom of its mother earth, it has been the favorite of the cottage and the palace; children have plucked it with delight, and the most tasteful have watched it in all its progress, to its present high state ofcultivation. In 1832, it was one of five flowers selected for show at the London Metropolitan Exhibition of Flowers, in honor of the Queen's birth day; and it will never lose a particle of its attraction.

Perhaps those who are absorbed in politics, or governed by ambition, to whom nothing is sweet but the sounds of the comitia or the eloquence of the halls of legislation, would take but little pleasure in repeating with me the lines on the culture of this little flower, by that "simple-minded peasant-poet," CLARE:—

"*Violets*, sweet tenants of the shade,
In purple's richest pride arrayed,
Your errand here fulfil;
Go, bid the artist's simple strain
Your lustre imitate in vain,
And match your Maker's skill."

While I, bending over the first vernal violet that rears its head in my garden, shall join with WORDSWORTH in praise of his favorite flower, the celandine:—

"Let, with bold, advent'rous skill,
Others thrid the polar sea;
Build a pyramid who will;
Praise it is enough for me,
If there be but three or four
Who will love my little flower."

This beautiful flower is a native of Siberia, Japan, and many parts, of Europe. The infinity of provincial names which have been bestowed upon it, would alone be sufficient to prove it to be a general favorite. It has been called, in addition to the names already given, *Love in Idleness*, *Live in Idleness*, *Call me to you*, *Three faces under a Hood*, *Herb Trinity*, *Flower of Jove*, *Ladies' Delight*, *Sparkler*, *Flamy*, with many others.

The cultivation of this plant is very simple: it may be increased by dividing the roots in the spring or fall, and also by layers and pipings. To obtain new varieties, the seeds from the best sorts should be gathered as they become ripe, and sown directly. The plants will appear in about fourteen days: those of the spring sowing, will bloom in autumn, and the autumn plants in the spring; and if they are protected from the summer's sun, after ten o'clock, A. M., they will continue to bloom until the frost becomes severe.

The best sorts are the *purpùrea*, *álba*, and *Carter's Prince of Orange*, the latter raised from seed, in 1832, by Mr. William Carter, at the Botanic Garden, Cambridge; to these add *Perfection*, *Sir Walter Scott*, *Mary Queen of Scots*, *Luna*, *Admiral*, and some other choice varieties, to be found in every good collection.

Roxbury, *Dec.* 1834. S. WALKER.

ART. VI. *Cultivation of the Mímulus lùteus, var. rivulàris.*

By the CONDUCTORS.

THIS little beauty of the flower-garden and green-house, is easily raised from cuttings, or from seeds, which it produces in great abundance. There are three or four fine new varieties, originated in the English gardens, during the last two years, and which are, from the colored plates and descriptions, much more beautiful than the lùteus rivulàris. They will probably be introduced into our gardens before another season. The seed, if sown during January, February or March, should be placed in the green-house; it will be up in a few days, and the plants should be potted off into the smallest size pots. When they are rooted, they should be kept constantly watered, and as soon as the pots are filled with roots, shift them into the next size, in which they will flower freely. Cuttings should be two or three inches in length, and they will root without difficulty.

Put five or six cuttings in each pot. The soil for them should be, about two thirds loam, and one third leaf mould, or peat earth. Mimulus moschàtus, (musk-scented) and punctàtus, are very pretty plants, and should be in every collection. They may all be turned out of the pots into the border, during summer.

REVIEWS.

Art. I. *An Address delivered before the Massachusetts Horticultural Society, at their Sixth Anniversary, Sept.* 17, 1834. By J. C. Gray, Esq. To which is appended the Committee's Reports of the Fruits and Flowers exhibited at Faneuil Hall, and a List of the Members of the Society. Pamphlet. 8vo. pp. 40. Boston, 1834.

This excellent and interesting address, as well as all the previous ones delivered before the Society at its annual festivals, should be read by every lover of horticulture. They all contain much pleasing, as well as useful information. We do not know how the Massachusetts Horticultural Society, as one means, could better bring about the great objects for which it was instituted, than to publish an extra number of copies of every anniversary address, and distribute them gratuitously, or have them sold at cost by all the principal booksellers. Now, they are confined to the members of the society, many of whom, perhaps, do not feel as interested as individuals not having any connection with it, and who are thus deprived of the gratification of reading the address. The society has done wonders towards disseminating a taste for gardening pursuits, and this would be taking one more useful step to further its designs of circulating among the public, interesting and valuable information.

We had the pleasure of hearing Mr. Gray, and are happy to state that he was listened to by a large and respectable audience. As our Magazine may be read by many who will not see his address, we do not know in what manner we can render our pages more interesting, than by making a few extracts. In relation to horticulture, as an amusement, Mr. Gray says,—

"This art may be recommended, in the first place, as an innocent and salutary amusement. In bestowing upon it these titles, I have said very much in its favor. The topic of amusements has ever been a most perplexing and difficult one to the moral casuist. I suppose that no one would proscribe all relaxation. All admit that the most industrious individual must have his intervals either of recreation or of idleness. But what amusements should be recommended, or tolerated, is a question on which there is far less unanimity of sentiment. In this country, there is, I believe, both a small amount and a smaller variety of relaxation, than in most others. We are, at least in New England, emphatically, a grave people. The simple manners and rigid morals which have descended to us from our Puritan ancestors, our rigorous climate and stubborn soil, the equal distribution of property by descent and its necessary consequence, the small number of men of wealth and leisure, have rendered us, though certainly not a gloomy, yet a serious and practical community. Many amusements, which have prevailed in other countries, never have, and we trust never will take root in our land. Of those which are fashionable among us, there are several which are denounced, either as deleterious, or at least perilous to our morals, by a large and respectable portion of our population. This is not the occasion to inquire how far such sentiments are correct. It is more to my purpose to observe that there is, I will not say no ground, but no pretext, for such objections against the pursuit of horticulture. He must be a stern and astute casuist indeed, who can detect anything in this occupation tending to inflame, to debase, or to enfeeble the mind. You are well aware, on the contrary, that a garden has been selected by all poets of all nations, as the abode of the virtuous in a future state; that horticulture has often been recommended by the strictest moralists, not only as a soothing, but as a most refining occupation; and that the wonders of creative power, with which it renders us conversant, have furnished the natural theologian with some of his most powerful and impressive arguments."

Mr. Gray thus speaks in regard to the importance of horticulture:—

"This art is, however, something more than a mere passing amusement. It well deserves to be cherished in our country, for the auspicious influence which it must exert on the manners and feelings of the community, should a taste for its splendid productions become a prevalent one. Mankind have found by experience, that the contemplation of what is graceful or beautiful, serves to correct and refine the taste, to expand and elevate the understanding, to soften and purify the heart. How these results are produced, it is for the metaphysician to explain, if he can; the results themselves are not the less real, nor the less manifest. It is on this principle, that the fine arts have been so carefully cherished by the ablest statesmen of older communities. No one, acquainted with the history or condition of those communities, can doubt that those arts have done much to counteract the evils of defective systems of government, and to supply the want of general education. With us, their progress must be for a long time, for obvious and cogent reasons, extremely limited,—at least, this must be said of those two most delicate arts, painting and sculpture.

"If, however, the productions of the gardener's labors are not to be placed in the same rank with the works of the painter or sculptor, they possess what in our country is a most important advantage over them, viz. that they are within the reach of the great mass of our community. Pictures and statues are, even in older nations, confined to the precincts of cities, or the villas of the opulent. Not so with fine flowers. The proprietor of the smallest farm in the country, or the inhabitant of the humblest tenement in the city, may decorate his house with ornaments, surpassing in richness and delicacy, the most costly productions of the upholsterer. The furnishing of a single apartment in a style of very moderate splendor, involves a greater expense than many florists incur at seed-stores and nurseries during the whole course of their lives. Well, then, does this art deserve encouragement in our republican and economical country."

Mr. Gray thus alludes to the too frequent practice of many of our farmers and agriculturists, in cultivating large tracts of land:—

"In our country, where land is cheap and labor high, our farmers are strongly induced to spread their efforts over a large surface, to cultivate a great extent of ground superficially, rather than a smaller portion thoroughly. This practice, if justified to some degree by the circumstances of the country, has been carried quite too far for good taste, or even good economy. Nothing would tend more to check the evils consequent on such a system than the general practice of gardening. It is in a garden that we should learn those principles of neatness and order, that thoroughness in subdividing and enriching the soil, that war of extermination against weeds and insects, and, above all, that vigilance in embracing precious and fleeting opportunities, which are the prominent characteristics of the thriving farmer. It is by this cultivation in miniature, so to speak, that we should be kept from despising those little things which, in agriculture as in every thing else, must ever be duly regarded by all who aspire to great results. If every farmer among us were, also, a florist,—and every farmer may be one to a considerable degree,—the neatness and precision of his gardening operations would soon extend itself,—if not already existing there,—to his field cultivation, and our villages would exhibit much of that exactness and elegance, so conspicuous and so pleasing in our Shaker settlements."

The following just tribute is given to the excellent and venerable president of the London Horticultural Society:—

"How few can hope for a reputation so extensive, so enduring, and so enviable as that which will be awarded, both in his country and ours, to Thomas Andrew Knight. How long and how highly shall we honor this high-minded Englishman, as the disinterested and unwearied benefactor of our infant horticulture? How nobly has he exemplified the great truths, that the firmest loyalty to our own country is compatible with the utmost liberality towards others; and, that when the culture of the soil is in question, our views should know no other bounds than those of the great family of man. A few years, I trust, will show that there are those among us who emulate his achievements, as I am sure there are many who partake of his spirit. I speak from high authority, when I say that the friends of horticulture in Europe are turning their eyes anxiously to our country. They are looking to our bright skies and fresh soil for new varieties of delicious fruits, to supply the place of those which, after centuries of existence, are at last passing away. Hopes so just and reasonable, are surely not destined to return void."

To the valuable and important labors of the late president of the Massachusetts Horticultural Society, Mr. Gray thus, very justly, alludes:—

"Of most of those individuals to whom I refer, I am forbidden to speak as I could wish, by the delicacy we owe to all within the circle of our personal intercourse. I must be permitted, however, to allude particularly to one, who has lately retired from that circle; I mean the gentleman who has presided over our society ever since its formation, but who for many years previous, had devoted much of his time and thoughts to agriculture and horticulture. You well know, my friends, how he has labored in our cause. You are all aware of the aid which it has derived from his powerful and accomplished mind, his unwearied industry, and his elevated character. His services will long be respectfully and gratefully remembered, and I am sure that I speak in the name not only of all who hear me, but of all who know him, when I express the best wishes for his health and happiness. Wherever he may go, though no longer *among us*, he will never cease to be *of us*."

We cannot agree with Mr. Gray, in his remark that "New York, a city which has added to its other high claims to distinction, that of taking the lead in American horticulture." Their nurseries and gardens may enumerate in their large collections, many choice varieties of fruits and plants. But the successful and scientific management of such, has been carried to the highest state of perfection by the amateurs and gardeners in our own vicinity.

Mr. Gray concludes with an appeal to the merits and beauty of the exhibition, as evidence of the success, which has attended the exertions of the members of the Massachusetts Horticultural Society.

ART. II. *Reviews and Extracts of Works on Horticulture.*

1. *The Gardener's Magazine, and Register of Rural and Domestic Improvement.* Conducted by J. C. LOUDON, F. L. S. H. S. &c. In monthly numbers, 8vo. 1s. 6d. each. London. 1834.

2. *The Horticultural Register, and General Magazine of all useful and interesting Discoveries connected with Natural History and Rural Subjects.* Conducted by JOSEPH PAXTON, F. L. S. H. S. In monthly numbers, 8vo. 1s. each. London. 1834.

In our reviews and extracts from these excellent works, (especially that conducted by Mr. Loudon) we commence with the volumes for the last year. We find in them a number of articles, containing much and valuable information, which we shall, if possible, present to our readers. These will be followed up with extracts of everything useful from each successive number, as received. We hope thus to keep our readers informed of all improvements in horticulture which may be made by our transatlantic friends.

On growing Ferns and other Plants in Glass Cases, in the midst of the Smoke of London; and on transplanting Plants from one Country to another, by similar means.

I was accidentally led, about four or five years ago, to make some experiments on the growth of ferns, &c., in closely glazed vessels, from the following circumstance. I had buried the chrysalis of a sphinx, in some moist mould, in a large bottle covered with a lid. The insect attained its perfect form in about a month, when I observed one or two minute specks of vegetation upon the surface of the mould. Curious to observe the developement of plants in so confined a situation, I placed the bottle outside one of my windows with a northern aspect. The plants proved to be one of *Pòa* ánnua, and one of Nephròdium [Aspidium *Swz.*] *F*ìlix más. In this situation they lived more than three years, during which time no fresh water was given to them, nor was the lid removed. The fern produced four or five new fronds every year; and the *Pòa* flowered the second year, but did not ripen its seeds. Both plants ultimately perished from the admission of rain water, in consequence of the rusting of the lid. I have repeated this experiment, with uniform success, upon more than sixty species of ferns, belonging to the following genera:—*A*splènium, Aspidium, *A*diántum, *B*léchnum, Cheilánthes, Davállia, Dicksònia, Doódia, Grammìtis, Hymenophyllum, Lycopòdium, Nephròdium, Niphóbolus, *P*olypòdium, *P*tèris, and *T*richómanes. Various other plants, vascular as well as cellular, and more particularly those which delight in humid situations, succeed as well as the ferns. Among others may be enumerated:—Oxalis Acetosélla, *A*nemòne nemoròsa, Dentària bulbífera, Pàris quadrifòlia, *Verónica* montàna, *Listera* (Neóttia) Nîdus àvis, &c. The method of proceeding is very simple. The ferns, &c., may be planted in boxes of any size or shape, furnished with glazed sides, and a glazed lid. The bottom of the box should be filled with nearly equal portions of bog moss, vegetable mould, and sand; and the ferns, after planting, should be most copiously watered, and the superfluous water allowed to drain off through a plug-hole in the bottom of the box: the plug is then to be put in tight, the glazed lid applied, and no farther care is requisite, than that of keeping the box in the light. In this way many plants will grow for years, without requiring any fresh supply of water. It is scarcely necessary to point out the advantages which this plan (subject to some modifications, according to the nature of the enclosed plants) offers to the horticulturist, and to the physiological botanist. To the one, it furnishes a ready mode of importing most plants, without risk, from the most distant regions of the globe; and, to the other, the opportunity of making more accurate experiments than have hitherto been practicable, on many important points connected with vegetable economy; such as on the germination of seeds, and the developement of plants in various kinds of air, and soil, &c.; but upon this part of my subject I need not here enlarge. The numerous experiments I have already made have, I think, established one important fact—that the air of London, when freed from adventitious matter, is as fitted to support vegetable life as the air of the country. I cannot conclude this short account, without expressing my warmest acknowledgments to the Messrs. Loddiges, who have at all times furnished me with every plant I required from their invaluable collection.—N. B. Ward, *Wellclose Square, London. March* 6, 1834.—*Gard. Mag. for May.*

On the Management of the Vinery. In order to prevent the fruit from suffering from the effects of damp, (an evil so often complained of in vineries) the young wood should always be kept thin, by taking the tops from the shoots, three or four joints above the fruit; and not allowing them to ramble through the house, shading the fruit from the sun, and preventing the free circulation of air among the bunches and berries. For the same reason, the lateral shoots, which push from the young wood, should be cut or pinched off at the first or second joint, so as not to endanger the bursting of the bud on the main shoot.

It is well known, that every place from which the sun and air are partially excluded, is sure to be damp: the walls of a house, for instance, which are covered with ivy, if it is not in a very dry situation, will be found wet and uncomfortable in the inside. When this is considered, it will appear evident that, upon the same principle, the vinery in which the wood is not properly thinned, must suffer in the same manner, though in a less degree. Particular attention should be given to the thinning of the fruit; taking out most berries in the heart of the bunch; leaving those towards the extremities; and making the whole very thin. Those kinds of grapes the bunches of which are of a branchy nature, such as the black Hamburgh, the Syrian or white Nice, &c. should always be stretched out a little, and tied up with a small piece of matting, that they may have room to swell, and be kept from crowding each other. This is not only a means of preserving the bunches from damp, but also of having better-swelled and finer-flavored berries. It is a common practice with those who have fruit in their vineries, when the season is far advanced, to keep up the temperature of the house throughout the night, with artificial heat, and to let their fires go nearly out when the morning dawns. I do not, however, approve altogether of this plan. Let any person go into a vinery in the morning, before it is aired, and when the sun is shining upon it, he will feel the atmosphere moist; and on examining the fruit, will perceive that it is covered with dew. Now, if this moisture be allowed to remain for any length of time, it certainly must prove injurious; and to remedy the evil seems to be an object worth attention, A very small degree of artificial heat will be found sufficient throughout the night; but, as soon as the sun arises in the morning, and shines upon the house, by increasing the temperature, and giving a sufficient quantity of air, the moisture will be expelled, and the atmosphere of the house will become dry. It may not be unnecessary to remark, that the fruit should be often examined; and, if there are any of the berries on which the damp has taken effect, they should be carefully picked off; as, if they are suffered to remain, the damp will soon spread over the whole bunch.—A YOUNG GARDENER, *Mid-Lothian, Sept.* 18, 1834.—*Gard. Mag. for May.*

The Cereus speciosissimus at Woodhall gardens, in Renfrewshire, attains an extraordinary size and beauty. The late excellent Mr. Henderson, gardener there, used soil composed of two parts of rich loam, three of decomposed manure, and one consisting of equal quantities of peat, sand, and broken tiles. The plant is placed in a large pot, and trained to the back trellis of a pine stove; where, in July, 1833, when I saw it, it occupied a surface of eighty-four square feet, and had three hundred flowers all open at the same time. Mr. Denholm, the present gardener, gives this and other species of the Cáctus family a more ample supply of water than is usually done, while they are maturing their flower-buds; and to this he attributes, in a great measure, the vigor of the bloom. In winter, when the plant is in a state of rest, little or no water is given.—JUVENIS, *Glasgow, March* 7, 1834.—*Gard. Mag. for May.*

An Orchard in Pots. Take some large pots, eights or twelves of the London potteries, some strong yellow loam, mixed with one third of good rotten dung in lumps; well drain the pots with large pieces of tiles or broken pots, and in this compost, plant selected small dwarfs of Hawthorndean, courtpendu plat, Kerry pippin, golden Harvey, Cole's golden drop, Keswick codlin, and scarlet nonpareil apples; Passe Colmar, sickle, Beurré de Capiaumont, Marie Louise, and Easter beurré pears; also two or three dwarf prolific nuts. Let the pots stand in the centre, if a confined garden; and by all means keep on their surface, all summer, lumps of rotten manure. Thus treated, it is astonishing how they will flourish; and, if well supplied with water, (if manured water, the better) they will bear plentifully. In very severe winters, a little straw should be put over the pots, to prevent the roots being injured by the extreme frost. This may certainly be called a cockney orchard; but I know, that if it is not profitable, it is very pretty.—J. RIVERS, Jr., *Sawbridgeworth Nursery, Feb.* 1834.—*Gard. Mag. for July.*

Culture of the Ranunculus. Remove twelve inches of the surface earth from your beds, taking the level from your walks, then have the earth at bottom well dug, or broken up eighteen inches; or, if it will admit of it, two feet more in depth. Then lay in manure seven inches in thickness over this, say three parts of cow-dung, six months old, and a fourth part of sand, or mud, obtained, if possible, from the bank of a river, well mixed together. If this manure be prepared a few months before it is used, and occasionally turned, the better; over this, place a compost of five inches of the following materials:—Cow-dung mould, three years old, if possible, one sixth; sea sand, one eighth; turf mould, one eighth; leaf mould, well reduced, one eighth; fresh, sound earth, one third. Your beds will now be some inches above the level of your walks, but in a week or ten days they will sink down considerably; you might give the beds a slight fall, say one fourth inch to a foot; but as the ranunculus requires a continual supply of moisture, a greater fall than this would be injudicious. When your beds are in a proper state, make impressions or drills across them with the handle of a hoe, by pressure, about one and one fourth inches deep, and five inches asunder, and plant your roots at four inches distance from each other; then fill up your drills with the same compost. The ranunculus should never be planted deeper than one inch under the surface, as light and air seem to be essential to their very existence. By adopting the plan laid down above, your roots will be about four inches from the manure, at which distance sufficient nourishment will be obtained; but if the roots come at all in contact with manure, they will be inevitably lost. It would be well to remark, that cold, or naturally wet ground, is unfit for this plant, for although the ranunculus likes moisture, it prefers partaking of it passing—for this reason, the bottom of the beds should have a quantity of gravel thrown in, if at all wet or cold; indeed, such ground ought to have sewers to carry off the surplus water. An eastern aspect is the best; but a southern one will answer very well, provided it is a distance from the garden wall. Ranunculuses should never be planted within twelve feet of a wall or hedge. Anemones may be treated in a similar manner.—*Hort. Register.*

MISCELLANEOUS INTELLIGENCE.

Art. I. *General Notices.*

The many-stemmed Mulberry, (Mòrus multicaùlis) is said to be greatly superior to all other species and varieties in the number of leaves it produces, as well as in the quantity of nutriment which these leaves contain. [Plants, we believe, may be readily obtained at any of the various nurseries throughout the country.—*Conds.*]

Influence of Color on Heat, the Deposition of Dew, and of Odors. Dr. Stark, in a paper in *Jameson's Journal,* vol. xvii. p. 65, has shown, by experiment, that one principle operates in the production of all the above results. A black color, whether in solids or fluids, absorbs heat most rapidly, and parts with it most rapidly; dew is also deposited more rapidly on this color than on any other, and with proportionate rapidity evaporated from it. Odors, whether agreeable, offensive, or of infectious diseases, are, in like manner, absorbed with greater rapidity, and in greater quantity, in a given time, by black colors; and discharged by these colors with proportionate quickness. The other colors are next effective to black in the order of blue, brown, green, red, yellow and lastly white; which last absorbs and gives out heat, dew, and odor more slowly than any other color. These facts will afford valuable hints to gardeners for the colors of walls, of walks, of rockwork, of soils, of coverings for protection, and even of their dresses.—*Gard. Mag.*

Art. II. *Domestic Notices.*

A great Yield. Caleb Chase writes the editor of the Portland Courier, in illustration of the advantages of high cultivation of land, that he raised in a garden, from four grains of wheat, eighty heads, one of which measured six and a half inches in length. From these eighty heads, he obtained *four thousand five hundred and thirty-six grains of wheat,* measuring little short of half a pint, being one thousand one hundred and thirty-four fold. This is worthy the attention of those farmers who are only desirous of increasing the number of acres on their farms, without improving the quality of the soil.—*N. E. Farmer.*

A great establishment for the product and manufacture of silk, is in progress near Olneyville, Rhode Island. On a most beautiful spot, an association has planted many mulberry trees, and intend soon to have fifteen thousand of them ready for use—large numbers being already four years old. They have also some newly invented machinery at work, by way of experiment, which succeeds well in reeling the silk from the cocoons—a very difficult and delicate operation.—*Niles' Register.*

Superior Squash. Mr. S. Thayer, of Braintree, has favored us with a squash of surpassing magnitude and fine form, which he denominates *Whig squash.* It weighed, when taken from the vine, forty-two pounds, and is respectfully submitted to the inspection of the curious connoisseur in prime productions.—*N. E. Farmer.*

We find the following description of a new squash, which was presented at the exhibition at Faneuil Hall, in September last, by Mr. J. M. Ives, of Salem in the New England Farmer. In a communication from Mr. Ives, he calls it the *Autumnal Marrow.* We have had the promise of one from Mr. Ives, as also from another gentleman in Salem, who raised it in great perfection, the last season. If either of them see this, it may remind them of their favor. When we have tested its qualities, we shall not forget to speak of its merits. —*Conds.*

"Fruit obovate: depressed on one side: stem very large, and inclined upwards, almost at right angles with the fruit: a small truncate callosity at the other extremity. Color reddish cream, with spots or dashes of bright ochre, when in maturity. Flesh orange: seeds large, pure white, with an elevated margin. Average weight, eight pounds.

The above new variety of squash, Cucurbita Melopepo var. has been lately brought into notice in this vicinity, on account of the delicacy of its grain, and excellence of flavor. We have called it "Autumnal Marrow," as it comes in succession to the summer varieties, but may be kept throughout the winter.

A peculiarity in this variety is the extreme thinness of its skin, being of the consistency of the inner envelope of an egg.

We recommend it to all lovers of this vegetable, for its many excellent qualities: we speak thus confidently, from the testimony in its favor of those who have used it at their tables."

Art. III. *Queries, Criticisms, &c.*

We received the following letter, a few weeks since, which we insert at length:—

Gentlemen,—You will, I trust, excuse the trouble which this communication may give you. I was much interested with the account of your grape, cultivated in a pot, and mentioned in the committee's report, published in the N. E. Farmer of October 15th. Will you have the goodness to give me such information as may enable me to repeat the experiment? Among other particulars,—was the cutting of one year's growth, without any of the wood of the previous year attached? What length? How many eyes left above the soil? What time of year planted? What size the pot? Was any artificial heat applied? Any thing peculiar in the soil? Did you water it frequently? &c.—Yours, *P. C., Brunswick, Me., Nov.* 10, 1834.

In our next number, we hope to furnish our readers with an article for the successful cultivation of the vine in pots.—*Conds.*

ART. IV. *Massachusetts Horticultural Society.*

We commence our reports of the Horticultural Society, which we intend to follow up with the utmost accuracy, with the exhibition given at Faneuil Hall, on the 17th, 18th, and 19th of September last: it being the sixth anniversary of the Society. We had the pleasure, as chairman of the committee for the purpose of arranging and labelling the plants and flowers, on that occasion, to draw up the report appended to the pamphlet, containing Mr. Gray's address. We took a few notes for the express purpose, some of which were made in that report; but not wishing to extend it to too great a length, they were partly omitted. We have here added some of them.

We cannot here omit to mention the importance which such exhibitions would have in disseminating a taste for horticulture and floriculture, if they were given annually. It is only by presenting to the eye, in such profusion, all the rich beauties of Flora and Pomona, that the taste, which in many individuals would perhaps remain dormant for years, can be called forth. The rose, or the modest violet viewed singly, would present but small attractions to an inattentive observer; while masses of them, in all their various colors, would strike with wonder and astonishment. To the amateur and gardener, such exhibitions are of incalculable benefit. All are apt to place too much belief in their own methods of cultivation and practice, and some even think that their productions are not equalled, or certainly not surpassed, by any. But when viewed and compared with those of others, they see they have let their own judgment mislead them, and that they may yet add much towards perfection. We hope another season will find every horticulturist ready to aid in increasing the character of an exhibition, as useful, and we may say profitable, to the interests of society, as the last.

"The display of the various plants and flowers which decorated the Hall, was splendid beyond description, and far exceeded the most sanguine expectations of the committee. Although the proper season to show hot-house and green-house plants to advantage is during the spring months, when they are in full bloom and beauty, yet many varieties, especially those with evergreen foliage, are pleasing and interesting objects at all seasons of the year. Many of the species presented were very choice and rare. There might be seen the Banana of the West Indies, the Fig, from Persia, the Coffee, from Arabia, the Lemon, Orange, Pomegranate and Sago-Palm, with many other interesting plants, natives of a tropical clime. Among those ornamental, as well as useful, were the variegated Holly, Myrtle, Laurel, Magnolia, Acuba, Box-tree, Aloes, and the elegant India-rubber tree. Some were remarkable for either their curious foliage or flowers, as the Arum, Pourrètia, Eucalyptus, Nandína, Cáctus, etc. Others for their delightful and agreeable odor, as the Hedychium gardneriànum, Polyánthes tuberòsa, Pancràtium Fúnkia, Jasmìnum, etc. Those conspicuous for the splendor of their rich and brilliant colors, were the Erythrína pícta, near eight feet in height; the Vallòta purpùrea (once Amaryllis), with six expanded flowers; the Gladiolus natalensis, with three tall spikes, and numbering near twenty open flowers, which, for magnificence of bloom can be eclipsed but by few plants at this season of the year. Among the various flowers and charming bouquets which adorned the tables, was a large collection of the superbly splendid Georgina (Dahlia), amounting, in all, to nearly five hundred flowers. There was also a beautiful collection of the lovely China and German Asters."

From John Lowell, Esq. Roxbury. Fine specimens of the Erythìna pícta and Justícia pícta, plants very rare in our gardens and green-houses, but which should be in every collection. Two elegant plants of the Citrus decumàna, with eight or ten ripe fruit, some of which measured five inches in diameter. These attracted much attention, and contributed greatly to the decoration of the Hall. Many other rare plants were sent from Mr. Lowell, among which was the Mùsa Sapiéntium, (a Banana tree). J. P. Cushing, Esq., of Watertown, sent some fine plants of the Lemon and Orange, and many others, among which was the Laúrus nóbilis, a fine specimen. J. Lemist, Esq., of Roxbury, contributed, among others, some fine plants of the Agàve americàna and A. americàna var. variegàta, and Cycas revolùta, (Sago Palm).

J. T. Wheelwright, Esq. and Mr. Charles Senior sent numerous plants, as follows:—Egg-plants, China Asters, Rhododéndrons, Caméllias, Myrtles, Cáctuses, etc. William E. Payne, Esq., Waltham, some fine Orange and Lemon trees. Some beautiful plants of the Variegated Holly, (Ilex variegàta) Justícia picta and Cìtrus aurántium, var. variegàta, from William Pratt, Esq. Watertown. Agàve americàna, from N. Davenport, Milton. Some fine plants from the choice collection of J. P. Bradlee, Esq., Boston, consisting of Caméllias, Rhododéndrons, Myrtles, Pittospórus, etc. A magnificent plant of the Fìscus elástica, (India-rubber tree) nearly ten feet in height, from S. Appleton, Esq., Boston. A fine Broad-leaved Myrtle, in full bloom, (a most beautiful sight!) from T. Dowse, Esq., Cambridgeport. From Samuel Sweetser, Esq., Cambridgeport, some fine plants, among which were Ilex variegàta, Diósma álba, Ericas, Myrtles, etc.

Mr. Sweetser presented a most superb specimen of the *rare* Gladiòlus natalénsis (called by some psittacìnus). This plant is of late introduction into this country, never flowering here (about Boston) till this season. It was pictured in the Botanical Register, (London, ta. 1442) for October, 1831, and is there described as follows:—"Stem from three to four feet high, well furnished with leaves, and terminated by a spike, a foot in length, of large blossoms, yellow spotted, striped, and marginated with scarlet. The colors are indeed splendid beyond any thing that can be expressed, except by the most elaborate miniature painting." The specimen above mentioned, as well as one exhibited at the Society's room by Messrs. Winship, and one which we had the pleasure of seeing at the country residence of T. Lee, Esq. Brookline, surpassed even this most seemingly exaggerated description. The plant exhibited by Mr. Sweetser, was exceedingly strong, having four spikes in full bloom at once. It is quite easy of cultivation, and is propagated very readily.

A fine large plant of Hydrángea horténsis, from I. Livermore, Esq., Cambridgeport. Messrs. Hovey, Cambridgeport, plants of Fùchsia, Gomphrèna, Maurándia, etc. A Black Hamburgh Grape-vine, growing in a pot, and bearing twenty fine clusters of grapes, weighing nearly half a pound each. This vine was but eighteen months from a cutting, and may be considered a remarkable crop from so young a plant. The experiment shows what can be done in pot culture; and to what further success it may be carried, remains to be discovered by repeated trials.

The plants from the Botanic Garden added much to the interest of the exhibition. Among many very rare, were the Astrapæa Wallichii, Hàkea salìgna, Pourrètia spinósa, Coffæa arábica (Coffee tree), Vallòta purpùrea (formerly Amaryllis purpùrea), Melástoma, Jambòsa, Nandìna, Eucalyptus, Ardìsia, Bánksia, Melaleùca, Leucadéndron argéntea (silver tree), Fùchsia Thomsònia, etc. The Vallòta was splendidly in bloom; the Bánksia, with its brush-like spike of flowers, attracted much observation; the Silver tree was beautiful, but too small a plant to be observed, as it should be, among so numerous a collection. M. P. Wilder, Esq., of Dorchester, contributed some magnificent specimens of the Caméllia (double white), Jambòsa vulgàris, and Acàcia lophánta, the latter of which, with its graceful foliage, towering above other plants, had an admirable appearance. Mr. Wilder also sent a fine Orange tree, an Agàve, Echium, Ilex, Cycas revolùta, Acùba, Arum, etc.

From J. W. Boot, Esq. Plumbágo, Begònia, and a Pancràtium, (very beautiful). From Charles Taylor, Esq., Dorchester, Acàcia, Gardènia, Cássia, Orange trees, etc. From Madame Eustis, some fine Orange and Lemon trees, and other plants. A Yùcca gloriòsa, which, with its rigid spiny leaves and elegant pyramidal, terminal spike of white flowers, had a grand effect. Some fine Brown Beurré and Broca's Bergamot Dwarf Pear trees, in pots, bearing the fruit, were sent, with other fine plants, from E. Breed, Esq. Charlestown. From Messrs. Winship, of Brighton, a fine specimen of a beautiful Fern (Aspídium exaltàtum). Plants of Corræa, Metrosidèros, Acàcia, Hedychium, and a branch of the Buffalo berry, with ripe fruit.

J. G. Joy, Esq., Boston, sent two fine Orange trees. From Mr. Thomas Willott, plants of Nèrium, Càctus, Acùba, Crassùla, etc. From W. Upham, Esq., two Orange trees, a Jasminum, and Myrtle. D. S. Townsend, Esq., various plants, Orange trees, etc. Thomas Mason, Charlestown, Acàcia armàta and lophànta, Alòysia, Dàphne, Erica, 3 var. Rhododéndron, Gardènia, Diòsma, Magnòlia grandiflòra, etc. M. Burrage, from the garden of Mrs. Bigelow, Medford, sent an elegant plant of the Citrus myrtifòlia, loaded with ripe fruit. Pots of Isabella and Sweet Water Grapes, from A. D. Williams, Roxbury.

The display of Georginas, on the centre table, was gorgeous and imposing. Mr. E. Putnam, of Salem, sent about fifty beautiful, distinct varieties, some of which were shaded, spotted and striped. M. P. Wilder, Esq., exhibited about twenty varieties; among which were Picta, Burleigh's William IV, Brewer's, Sulphureum, Majestum, and many other new and fine varieties; ten or twelve varieties from S. Walker, Roxbury; about twenty-five from the Botanic Garden, by William Carter; ten or twelve varieties from William Kenrick, Newton; and numerous varieties from other contributors. The China and German Asters were finer than any we have ever seen; almost equal in beauty to the deservedly admired Georgina. We have no doubt but the varieties will, in a few years, be as numerous as those of the latter flower. Twelve distinct and elegant varieties, were contributed by Messrs. Hovey, as follows—red, blue, white, ash-colored, blush, grey, red and white, blue and white, grey and white, white with red centre, blue with light centre, and pink and white. Mr. E. Putnam exhibited a very large variety; Mr. Putnam also sent a flower of the beautiful new yellow Noisette Rose, which we consider one of the finest of the yellows. A beautiful bouquet of white and yellow Tea, and other Roses, from Mr. Wales, of Dorchester. Various flowers and bouquets were furnished by Messrs. Sweetser, Wilder, Hovey, Richardson, Gardner, Worthington, Phipps, Kenrick, Walker, Perkins, Russell, Mason, Leathe, and John Kenrick.

The exhibition, on the whole, argues well for the success of horticulture; the arrangement of the plants was not exactly such as to show them to the most advantage, many of those which require to be seen close to the eye to admire their beauties, being hidden by large plants; but, being rather hastily done, as well as could be expected. The pendant wreaths of flowers and evergreen, which festooned the ceiling and galleries, had a rich and tasty appearance. Part of these were furnished from the Society's garden at Mount Auburn. Great credit is due to the committees, for their exertions to procure every thing which would add an interest to the exhibition.

We have not room to notice the whole of the report of the Fruit Committee; we mention a few of the new and most valuable varieties which were presented.

From J. Lowell, Esq., some fine specimens of the Pitmaston White Cluster Grape; this is a seedling, raised in Pitmaston, England, by J. Williams, Esq., in 1812; but has not found its way into this country, till imported by Mr. Lowell, two years since. It is a grape highly deserving of extensive cultivation; being a great bearer, earlier than the old Sweetwater, and of excellent flavor. We think it will prove a desirable variety to grow in pots. Mr. Jacob Tidd, Roxbury, sent some extraordinary large clusters of the White Nice, two, weighing eleven and a half pounds.

R. Manning, Esq., Salem, exhibited a collection of upwards of forty new and choice varieties of pears; some of them, though premature fruit, were of the more recently introduced kinds. Mr. Manning is zealously devoted to the cultivation of pears, and has used great exertions to collect together all those that are truly valuable.

The Bartlett, Seckle, Capiaumont and other Pears exhibited were very fine. Some Royal Charlotte Peaches, from Mrs. Bigelow, of Medford, were greatly admired, as also the rich baskets of fruit contributed by S. G. Perkins and T. H. Perkins, Esqrs. A plate of Figs, from John Lowell, Esq., in perfect maturity, had a rich appearance. The Fig is much more deserving of cultivation than many other fruits, and we have no doubt, ere long, they will be grown in houses erected, exclusively for their management.

The exhibitions at the Society's rooms, since the anniversary, have not been very attractive; we give them in order, naming, however, only those fruits and other productions, which will be of interest to our readers.

September 27th. Exhibited.—Washington and Beurré Knox Pears, by Hon. John Lowell; Morris's Luscious White Peach, by Mr. E. Vose, (fine specimens of which have been exhibited several seasons in succession, by the same gentleman). Washington, Bezi Montigny and Raymond Pears; Royal George Clingstone Peaches; Yellow Ingestre, Rambour Franc and Api Noir Apples; Italian Prune and Late Green Plums, by R. Manning, Esq., Salem. Bezy Vàet, Beurré Knox, Rushmore Bon chrétien, Beurré Diel, Lowell, Heathcot, Fulton and Andrews Pears, by Mr. Samuel Downer, Dorchester. Some fine Jaques Peaches, by E. M. Richards, Dedham. A large Peach, from Messrs. Winship, accompanied with one of Mr. Knight's new pears (name unknown). This exhibition was the finest at the Society's room this season.

The display of flowers, especially Georginas, was by far the most rich and profuse, we have observed at any previous exhibition. Mr. E. Putnam, of Salem, presented fifty-three varieties of the Georgina; the most beautiful were Belladona, Maculata and Amanda; fifteen varieties from M. P. Wilder, Esq., among which was Sulphureum majestum, Picta and Burleigh's William IV; a large variety of new and choice ones from the Botanic Garden; fifteen varieties from S. Walker, Roxbury; the most prominent were Matilda, King of the Whites, and Earl Grey; Mr. Walker presented a number of pretty seedlings of the Viola, which is now becoming a favorite flower. Messrs. Hovey exhibited some new and rare, beautiful plants, among which were Lophospérum érubescens, Calámpelis scàbra, and Maurándia semperflòrens, (elegant annual climbers). Flowers, in variety, from Messrs. Winship.

October 4th. Exhibited.—Ronville, Beurré Knox, Heathcot, and Buffam Pears; New York White Clingstone and Melacoton Peaches, from R. Manning, Esq., Salem. Fine Capiaumont Pears, from S. Downer. Pears from Messrs. Pond, Heard, and others. Reinette Baumann Apples, from William Kenrick. From Thomas Hastings, East Cambridge, a seedling Peach, very fine; (the committee named this fruit Hastings Clingstone). Fine Peaches and Grapes, from T. Lee, Esq., Brookline. Plums and Quinces, from S. Pond, Cambridgeport. Some new Pears, from the Hon. John Lowell.

Presented.—Some specimens of Arrow Root, (Maránta *arundinácea*) brought from St. Helena,—where it is cultivated in great perfection,—and presented to the Society by J. L. Russell, Esq., Professor of Botany. They were accompanied with a letter from Mr. Russell, from which we make the following extract:—

"The value of this plant, as an article of medicine and of commerce, is well known. I am informed that successful attempts have heretofore been made in the Southern States, towards its cultivation. As to the particular species, which I present you, I cannot decide, there being four used in Materia Medica, and as articles of food; suffice it to say, that, as to its quality, it is equal to the very best cultivated. I presume that by preserving the roots through the winter in a dry and warm place, and forcing it in the spring, the usual hot weather of our summers would be sufficient to produce a good crop. If this were done, the trouble would be no greater than we take for the sweet potato; but as to real profit, taking into consideration the expense and time employed, an experiment can only decide. Its very great increase may be judged from the fact that at St. Helena, from two small tubers, were produced, in two seasons, *twelve bushels* fit for manufacturing the article technically called Arrow Root.

October 11*th.* *Exhibited.*—Surpasse Virgalieu and Henri Quatre Pears; Boxford Apples and Franklin Golden Pippins, from R. Manning, Esq., Salem. Capiaumont and Platt's Bergamotte, from Mr. S. Downer. Henri Quatre, Beurré Colmar d'Automne, and Beurré d'Aremberg, from William Kenrick. Apples, from E. M. Richards. Late Peaches, from S. Walker.

October 18*th.* *Exhibited.*—Fulton and Rushmore's Bon Chrétien Pears, Harvey Apples, and Japan Quince (Cydònia japónica), from S. Pond. Orpheline, Green Sugar and Beurré Rose Pears, from R. Manning, Esq., Salem.

October 25*th.* *Exhibited.*—Beurré Knox, (received from T. A. Knight, Esq.) and Marie Louise Pears, from the original tree received from Mr. Knight; also, Nos. 4 and 10, as numbered by Mr. Knight in his last donation, (accompanied with a letter) from the Hon. John Lowell, Roxbury. Henri Quatre Pears, from William Kenrick. Beurré Diel, Bleeker's Meadow, and Urbaniste Pears, and Beauty of Kent Apples, from R. Manning, Esq., Salem. Beurré de Roi Pears, from J. Prince, Esq., Roxbury. Apples, from the Hon. John Welles. Ribstone Pippins and White Calville Apples.

November 1*st.* *Exhibited.*—Green Sugar and Moorfowl-egg Pears, (supposed identical, by the committee, with the *Swan's-egg*) from R. Manning, Esq., Salem. Bezy Vaet, Forelle, Lewis and Chaumontelle Pears, from S. Downer.

November 8*th.* *Exhibited.*—Pears, (from an imported French tree) by Mr. Ward, Roxbury. Apples, from L. P. Grosvenor, Esq. A new native Pear, by B. V. French, (which the committee called Wilbur's Late) from Fall River.

November 22*d.* *Exhibited.*—Passe Colmar, Doyenne Gris, Sabine, Pastorale, Princesse d'Orange and Dutchess d'Angouleme Pears, (a fine specimen) from R. Manning, Esq., Salem. Two new varieties of Pears, received from T. A. Knight, Esq., presented by the Hon. John Lowell. Apples, from S. Pond.

November 29*th.* *Exhibited.*—Bezy Vaet Pears, by S. Downer. Moorfowl-egg, by William Oliver, Esq. The Foxley Pear, from the second donation of Mr. Knight. Seven varieties of Apples, from William Kenrick, received from E. J. Ford, Esq., of Alna, Me.

December 6*th.* *Exhibited.*—Passe Colmar and Lewis Pears, from E. Vose, Esq., Dorchester. The Passe Colmar were in a fine state of preservation, and were the finest specimens ever exhibited. Brown St. Germain, from William Oliver, Esq.

December 13*th.* *Exhibited.*—A beautiful Apple, by Thomas Whitmarsh, Esq., Brookline (name unknown). This Apple was received by Mr. Whitmarsh from the garden of Mr. Andrews, Salem.

Art. VI. *Quincy Market.*

Roots, Tubers, &c.	From $ cts.	To $ cts.
Potatoes:		
Common, per barrel,	1 00	1 25
per bushel,	33	40
Chenangoes, per barrel,	1 25	1 50
per bushel,	37	50
Eastport, per barrel,	2 00	2 25
per bushel,	60	80
Nova Scotia, per barrel,	1 25	1 50
per bushel,	40	50
Turnips:		
Common, per barrel,	75	1 00
per bushel (washed)	40	50
French, per bushel,	50	
Onions, per barrel,	1 37	1 50
per bushel,	70	80
per bunch,	4	5
Beets, per bushel,	70	80
Parsnips, per bushel,	70	80
Carrots, per bushel,	40	50
Salsify, per dozen,	25	37
Radishes, per bunch,	none.	
Horseradish, per pound,	10	12
Garlic, per pound,	15	20
Cabbages, Salads, &c.		
Cabbages, per dozen heads:		
Red,	75	80
Savoy,	40	50
Drumhead,	62	75
Brocoli, per head:		
White,	25	
Purple,	20	25
Cauliflower, per head,	20	25
Celery, per root,	6	10
Lettuce, per head,	6	10
Spinach, per peck,	33	37

Squashes and Pumpkins.	From $ cts.	To $ cts.
Canada, per cwt.	1 75	2 00
Common crook-neck,	1 25	1 50
Lima,	3 50	4 00
Pumpkins, each,	25	30
Pot and Sweet Herbs.		
Parsley,		
Sage,		
Marjoram,		
Savory,		
Spearmint,		
Fruits.		
Apples:		
Baldwins, per barrel,	3 00	
per bushel,	1 50	
Pearmains, per barrel,	3 00	
per bushel,	1 50	
Russetts, per barrel,	2 75	3 00
per bushel,	1 50	
N. Y. Pippins, per barrel,	3 00	
Pears:		
Iron white, for baking, per barrel,	4 00	
per bushel,	1 75	2 00
Sweet baking, per bushel,	1 50	1 62
Old St. Germain, per dozen,	75	87
Quinces, per bushel,	4 00	
Cranberries, per barrel,	6 00	6 50
per bushel,	2 12	2 25
Grapes, foreign, per pound,	50	
Pine Apples, each,	20	37
Oranges, per hundred,		
Lemons, per hundred,		
Chestnuts, per bushel,	3 00	3 25
Walnuts, per barrel,	4 50	4 62
per bushel,	1 62	1 75
Almonds, per pound,	13	15
Filberts, per pound,	6	8
Castana, per pound,	4	6

Remarks.—Potatoes have come in considerably plenty, and generally very good; the supplies from the eastward, this fall, have been uncommonly large, and still continue so. Those raised in the vicinity of Boston, not quite as good as in some seasons. Radishes have not yet come to hand. Lettuce has come in some, but not very plenty yet; the prices are, however, moderate. Brocoli and cauliflower are very scarce, and much sought after; these delicious vegetables are now much more used than heretofore, and are likely to become universal favorites. Onions have come in abundantly, and in most excellent order; the prices are very low this season, though, for the last two or three they have been uncommonly high. Cabbages are very large and good. Turnips are very fine, and prices moderate; those washed and cleaned command higher prices. Squashes are poor, owing to the very early frosts, and consequently not ripened well; the market has been supplied with them in great abundance, but they are now becoming quite scarce. Probably before spring, unless some imported ones are received, those remaining on hand will be in great demand. Apples are very scarce, and those fair and in fine order, much wanted. All kinds keep uncommonly well this season, owing, undoubtedly to the moderate crop. Very few Pearmains in the market; Greenings have been the most plentiful, and Russetts in considerable abundance. Pears for baking are tolerably plenty, but continue to bring good prices. Choice varieties are very scarce: we observed a few very fine old St. Germains, which readily brought the prices named in our quotations. Chestnuts are in good demand, scarce, and are very high. Other kinds of nuts are very plenty.

Boston, Dec. 20, 1834. M. T.

MONTHLY CALENDER

OF

HORTICULTURE AND FLORICULTURE,

FOR JANUARY.

We take great pleasure in being able to offer a few observations and remarks, which we intend to continue every month, on such horticultural and floricultural memoranda, as may be of considerable value to the generality of our readers. We do not do this with the intention of extending the pages of the work, at the expense of excluding other matter, but because we think it will be found extremely interesting, and one of the most useful objects of our Magazine. It will remind the amateur or practical gardener, of some of the most important operations, which should be performed in every month in the year, in every garden where any considerable collection of fruits, flowers, or vegetables are grown. Very often, various experiments and operations, which the industrious gardener is looking forward with anxiety for the proper season to execute them, escape the memory; especially if there happens to be an accumulation of labor. But if his eye glances over a calender, it would undoubtedly light upon some subject, which would immediately recal to mind something, which otherwise might have been forgotten, and a whole year lost, in waiting for the return of another season.

During this month, nothing can be done in the garden, unless the weather be uncommonly mild; preparations may, however, be made for the forcing of cucumbers, melons, asparagus, lettuces, radishes, &c., in such gardens and establishments as it is desired to have them very early. The time generally allowed, at this season of the year, for fruiting the cucumber, is from eight to ten weeks. If the seed-beds are made about the middle or end of this month, the fruit may be cut about the first of April. Radishes and lettuces come to perfection much earlier. The dung for cucumber beds should be collected in a heap, and, if the weather is very cold, should be covered on the north side with straw, leaves, corn-stalks or mats, so as to prevent the evaporation of heat, when it begins to ferment. When the whole becomes heated, (which may be easily discovered by plunging a sharp stick into it, and then holding to the hand) it should be turned over, and lay about ten days, before it is made into the beds; this preparation is necessary to destroy the rank heat, which would be apt to burn the plants.

Lettuces in frames, must be kept clear of all rotten leaves, till removed to the beds in which they are to head.

FLOWER DEPARTMENT.

The beauties of the flower-garden sometimes, in favorable seasons, linger even into the "bosom of winter," and the last, fading, frost-bitten chrysanthemums seem unwilling to cease their efforts, to expand their smitten flowers. Even from among the old haulm and stubble collected in the flower-border, as late as this month, may be seen the pansy, peeping out its head, in its gay colors, defying even the rigor of our stern winters; but the cold and northerly blasts exhaust and overpower the efforts of the vegetable world, and they remain dormant, until the return of vernal spring.

In gardens where there are green-houses and frames, they will require, during this month, considerable attention. Fires should be made in the green-house during all damp, as well as cold weather; plants often suffer more from dampness, than from frost. The plants in frames should be kept very dry, as this will aid them much in standing the winter. All decayed or yellow leaves should be picked from the plants, to give them a clean and healthy appearance. Air should be given every favorable opportunity, for long confinement to an impure atmosphere is extremely injurious.

Ranunculus, *Auricula*, and *Polyanthos* seed should be sown the latter end of this month, and placed in the front part of the green-house.

Cuttings of many species of green-house plants, may now be successfully put in.

Georginas may be potted and placed in a warm situation, to forward them so as to flower early.

Mignonette and Ten-week Stock may be sown in pots, about the latter end of this month, and placed in a warm part of the green-house, or in a hot-bed; care should be taken, when they are up, that they are not injured by too much moisture, causing them to decay off. The mignonette should be sown in a light, sandy soil, and the stocks in any rather rich mould.

Schizanthus seed, of the different varieties, should be now sown, if wanted to flower early. There are five or six varieties, in the English nurseries, of great beauty; two of which, only, we have ever observed in our gardens. These are, the Schizánthus pinnàtus and S. pórrigens: they are rather difficult of cultivation in pots, being rather impatient of too much heat or moisture; and often, very suddenly, when in full bloom, die off, by decay, at the base of the stem. No plant will, however, more amply repay all the care and trouble that may be bestowed on them, than the elegant genus Schizánthus. The best soil for them is loam, and leaf mould, with a small portion of sand. They should be repotted, as often as the pots are filled with roots, till they come into full flower. We observed, in the elegant new conservatory lately erected by J. P. Cushing, Esq., Watertown, under the care of his most intelligent gardener, some plants in bloom, about the middle of last month, on which we numbered at least *five hundred* flowers; some of the spikes were fifteen inches in length, and profusely covered from the top to bottom.

PLANTS IN BLOOM THIS MONTH.

In the green-house, during the month of January, there are not many plants to be seen in bloom: those, however, which are the most beautiful, and contribute to its decoration, are the Caméllia japónica and its numerous varieties.

In the different gardens and nurseries, the following will be in flower:—Caméllia japónica, C. álba plèna, C. anemòneflora, C. anemòneflora álba, C. dianthiflòra, C. pensillàta, C. fimbriàta, C. pæoniflòra, C. variegàta, C. rùbro plèna, and other choice kinds: Prímula prænítens, álba and purpùrea: Dáphne odóra: Sálvia splendéns, fúlgens and mexicàna: different species and varieties of Oxalis, Roses, Stocks, &c. &c.

THE

AMERICAN

GARDENER'S MAGAZINE.

FEBRUARY, 1835.

ORIGINAL COMMUNICATIONS.

Art. I. *Observations on the Cultivation and Management of the Grape Vine in Pots.* By the Conductors.

During the last three or four years, the cultivation of the vine in pots has attracted considerable attention among the English horticulturists. Much has been written upon the subject, by some of their best practical and scientific gardeners—various methods and experiments pursued—different systems adopted—and repeated trials made, to ascertain to what extent it can be followed with benefit and success. Some have asserted that the practice will almost preclude the necessity of the simpler and more common modes of growing the vine in an established grapery. Others, that not much reliance can be placed upon this plan of cultivation, for a good crop, and that, if pursued, it will only end in disappointment. Some, again, have been so sanguine of the superiority of pot culture, over all other methods, that they have, with great zeal and enthusiasm, maintained that grapes in greater abundance, and of richer flavor, can be produced from vines thus treated, than from those established in the border. Others have given much attention to this method, and have only been enabled to raise a very few bunches—the grapes of small size, inferior flavor, without color, and altogether unfit for the use of the table.

Whatever may have been the causes which have led to the above results, (the success of one, and the disappointment of the other) we are not enabled to say; but that such has been the effect of the practice, we may infer from reading the communications which have appeared in the English gardening magazines. As regards the extent to which the cultivation of the vine in pots may be carried, and the great benefits which may result from pursuing the practice, we are not yet fully aware; repeated experiments will only decide this. It certainly will never take the place of the old method of cultivating and raising the vine in borders, either as a saving of room, expense, or for procuring a more abundant and richer crop. The vine naturally loves a deep, rich, nourishing soil, and its strong and very rapid growth requires that its roots should not be confined to the small space of earth contained in a common garden flower-pot. But as a source of facilitating and accelerating the ripening of the fruit—as affording a means by which grapes may be produced from a mere cutting, in the very short space of eighteen months—as offering a substitute for standard vines, in a green-house or grapery, which it may not be desirable to fruit till they have acquired strength and size, and thus saving a loss of time to the cultivator—and, especially, as being within the power of any one who has not a proper or suitable place for raising grapes by the common methods—we think that the system will be of much utility; and, if their management is perfectly understood, it will afford to the gentleman, the amateur, or the practical gardener, a pleasing source of gratification and delight, in thus producing this most refreshing and delicious fruit. For what can be more beautiful, or more convenient, and above all, more agreeable to our friends or ourselves, than to place upon our tables a vine loaded with its rich and blushing fruit, to be plucked fresh from the branch; while growing in its full vigor, luxuriance and health.

The vine has been cultivated in pots for many years, and the method was adopted by some of the first writers and practitioners. Nicol mentions it, in his Calender, very particularly; Abercrombie and others recommend the trial; but we find very little information, as respects the practice, till the experiment was pursued with the energy and zeal of the philosophical president of the London Horticultural Society. In a paper, upon early forcing, read before the Society, in June, 1817, and published in their Transactions (Vol. II. p. 369—373), we find the following statement:—"A pot containing two cubic feet of very rich mould, with proper subsequent attention, is fully adequate to nourish a vine, which, after being pruned in autumn, occupies twenty square feet of the roof of the hot-house; and I have constantly found that vines, in such pots, being abundantly supplied with food and water, have produced more vigorous wood, when forced very early, than those of the same varieties, whose roots were permitted to extend beyond the limits of the house." Mr. Knight does not state how large a crop of grapes such a vine would bear, thus treated; and we may infer, that, as no other communication on the subject has appeared, the method was not extensively practised by him.

Since that time, however, many have attempted this method of cultivation; and among others, who have been very successful, are Mr. Buck, Mr. Stafford, and Mr. Mearns. The two latter gentlemen have written much upon the subject, in Paxton's Horticultural

Register, and the accounts of their very excellent management have attracted the attention of many amateurs and gardeners, who have added their experience to the practice. The late discovery of Mr. Mearns, called the *coiling system*, which was read before the London Horticultural Society, and also communicated as above, and in Loudon's Magazine, has revived attention to the subject. Various experiments will be tried, the coming spring, in this vicinity, of the practicability of the method. We are acquainted with several gentlemen, eminent in horticulture, who have already coiled their vines in the pots, and are only waiting the return of the proper season, to proceed with the system. The results of their experiments, together with those which we shall make, we hope to have the pleasure of communicating in our Magazine, the ensuing season. We have copied two of Mr. Mearns' communications, for the use of our readers, who may wish to make a trial of his method. They will be found under the head of Reviews, in the present number.

We may be allowed, before we proceed to give the particulars of the cultivation of the vine in pots, as practised by us the last season, to make a few remarks in regard to the difference of the two systems, and to compare their value. The great advantages of coiling vines, are stated by Mr. Mearns to be, the extraordinary space of time gained over the *single eye* system, and also to be founded on the principle, that the greater number of feeders or fibrous roots that are produced, the more vigorous and fruitful will be the growth of the plant. This principle we know to be founded on a law of nature, but how far it can be applied, in all cases, is to be determined. The transplanting of trees, shrubs, and vegetables, proceeds from the desire to increase the fibrous roots, check rapid growth, and induce fruitfulness; and hence we see, that any plant, were it to remain in one situation, from its first springing from the seed, or layer, or cutting, that its age of maturity would be proportionably slow, to one which had been frequently transplanted. But there must be something to bring into action this vegetative principle: a plant removed with its leaves or buds ready to expand, contains within itself sufficient nourishment to produce and support roots; but it is only by artificial means that grape cuttings can be made to produce roots in sufficient quantity to nourish a crop of fruit, the first season of their growth; and this, probably, will not be accomplished, unless they are kept continually excited.

The vines, when coiled, must be put in large pots, and plunged in a strong bottom heat, which will occupy much room, and the top of the branch will require to be wrapped up in moss, and always kept moist; this will be a constant source of care and perplexity to the gardener, who must give his whole attention till the grapes are set. With the method of propagating from single eyes, it is unnecessary to mention, without being too explicit, but a few of the advantages it has, in our opinion, over that of coiling. In the first place, a common hot-bed is all the bottom heat that will be required; secondly, they will require but little care, compared with the above method; thirdly, they will make as strong vines as can be wished, the first season—some of ours being half an inch in diameter; fourthly, they have produced, with us, more grapes than has been obtained (as has been stated), by the coiling system; and lastly, they require much less expense, and by judicious management, grapes may be produced almost every month in the year.

The conductor of the Gardener's Magazine (J. C. Loudon, Esq.), in a late visit through the northern parts of England, has noticed, among other things, the cultivation of the grape in pots, as practised at the Earl of Caernarvon's. The vines were raised from eyes, and treated precisely in the same manner we have adopted; and from seventy pots were produced four hundred and fifty pounds of grapes; the vines were only eighteen months from the eye. "This," says the conductor, "may be considered as the extraordinary result of extraordinary skill, attention and perseverance." We merely mention this to show that we have been as successful in our practice as some of the English gardeners; having raised from twenty-five to thirty bunches of grapes, which would average nearly half a pound each, on one vine?

The particulars of cultivation, which we have pursued, are made from memoranda taken during the time of their growth, from the first insertion of the eye in the soil, to the ripening of the fruit.

March 9th, 1833.—Shoots of the Black Hamburgh and White Chasselas grapes were selected, and formed into cuttings of single eyes or buds; this operation was performed by cutting off the wood in a sloping direction, one inch above the eye or bud, and two inches below. By this method of raising vines from single eyes, they produce a greater number of fibrous roots, which enables them to absorb an abundant supply of nourishment from the soil, and their growth becomes proportionably vigorous and strong. It is of importance, in selecting shoots for the purpose of forming the cuttings, to make choice of wood that is well ripened, short-jointed, sound, and with very little pith; such wood is more likely to be obtained from the middle or lower parts of branches of healthy vines, than near the extremities.

After the cuttings were prepared, pots of three or four inches diameter were filled with a mixture of one third light sandy loam, and two thirds leaf soil, in which the cuttings were inserted in a slanting position, and each eye covered about half an inch in depth, finishing off with a gentle watering, and the pots plunged to their rims in a moderate hot-bed.

At the commencement, strict attention was paid to the heat of the bed, as it frequently happens, if the heat is too powerful, the eyes will shoot up before any roots have protruded, and are very liable to be destroyed, either by a powerful sunshine, or from too damp an atmosphere.

The cuttings were watered very sparingly until the buds appeared above the surface of the soil; air was freely admitted during the day, and the bed covered at night, in order to preserve an equal temperature as possible.

March 24,—being fifteen days from the time the cuttings were put in the pots, they made their appearance above the surface, were shaded from the sun during the middle of the day, until they were well furnished with roots and the leaves began to expand; water was then regularly supplied, and plenty of air allowed, to prevent them from being drawn up weak.

By the *9th of May* the vines had grown to the height of from eight to twelve inches, and were shifted into pots of six inches in diameter, making use of the same kind of soil as the cuttings were put in, at the commencement. In repotting such young vines, they should be handled with great care, as the points of the roots, or spongioles, are exceedingly tender, and susceptible of injury; the leading shoots should also be carefully protected, and all laterals removed as soon as they appear. The success depends much upon keeping up the temperature of the bed, which should rather increase than decrease as the vines acquire strength; and, as the least check is very injurious in this early stage of their growth, should the heat begin to decline; it must be renewed by linings; for it is an essential point, that they be continually kept in a vigorous and rapidly growing state, the object in view being to produce one strong shoot for bearing fruit the following year.

June 25*th*,—the vines were from two to three feet in height, and were again repotted into pots fourteen inches in diameter, and fifteen inches in depth; the soil used, was composed of equal parts of light loam and leaf soil, with the addition of about an eighth part of the whole of very rotten manure. After potting they were removed into the green-house, and placed over the front flue; the shoots were trained upward in a direction corresponding with the slope of the roof, and ten inches from the glass; water was supplied frequently, and occasionally liquid manure, till the wood began to ripen; all lateral shoots were stopped just above the first bud, which bud, was retained to prevent the main eyes from starting prematurely.

July 27*th*,—the vines had attained the length of six feet; and, as a sufficient length of wood was now obtained, each shoot was stopped, by pinching off the point; this caused one or two of the uppermost eyes to start, and these were also stopped when they had grown two or three joints. By thus continually stopping the upper laterals, as often as they were produced, the rapid flow of sap upward was checked, and the shoots acquired greater strength and size. When the wood had become perfectly ripened, each vine was cut to the length of five feet, and all the laterals, which had been suffered to grow during summer in order to preserve the main eyes, were cut in close, leaving a straight, clean shoot.

In *November*, the vines were placed under the stage of the green-house, where they remained till the first week in March following, and were then placed in their former situation.

March 15*th*, 1834,—the buds began to open, and by the 30th, the fruit-buds were distinctly visible; two to four bunches appearing from every eye, with the exception of two or three of the lowest. When the fruit was fairly developed, the shoots were stopped at the second bud above the upper bunch; and *one* bunch only was retained on each shoot, with the exception of two vines; on these, *two* bunches to each shoot were allowed to remain, for the purpose of ascertaining more fully, to what extent vines in pots could support and ripen a crop of fruit. The two last mentioned vines were Black Hamburghs. One of them produced twenty-eight, and the other thirty bunches; but it ultimately proved to be too large a number for them to ripen perfectly. Water was plentifully supplied, as often as the surface of the soil in the pots became dry, and the foliage was syringed frequently. No other care was necessary throughout the season, than occasionally to tie up the bearing shoots, to prevent them from being broken by the weight of the fruit.

Five of the vines, viz. three White Chasselas and two Hamburghs, produced from eighteen to twenty-five bunches each, or one hundred and six collectively; and on the 30th of July, the Chasselas grapes were perfectly ripe; the Hamburghs had changed color, but did not arrive at maturity till about the 25th of August. Although from fourteen to twenty bunches are considered by the English cultivators as a good crop for one vine, yet, from the experience which we have had, thus far, in the culture of vines in pots, we have no doubt but that thirty bunches and upwards, of the small growing kinds, as the Sweetwater, Muscadine, &c., may be obtained from each vine, equal in excellence to those grown by any other method. Mr. Stafford, one of the most successful cultivators, says, that all the most delicate sorts are superior, when grown in pots, to any he ever saw grown on the rafters; and he further states, that he has often proved, that a pot placed in the house, on the 1st of January, and the same species trained up the rafter, and subjected to the same heat,—the former will ripen its fruit at least a month earlier than the latter.

The annexed plan is one we would suggest to those who wish to erect a small house, which would answer the purpose of growing grapes in pots without great expense.

Fig. 1, is a section of the house, which is ten feet in diameter, eight feet high at the back, and four feet in front; it is sunk two feet under the surface of the ground, as at (*a a*), if the situation is dry—otherwise it should be on a level; (*b*) is a flue which may commence at either end of the house, as convenient, and should be carried across the end, along the front, and out at the back; (*c*) is a pit in the centre, which may be used for many purposes; such as raising lettuces, radishes, &c., or for starting annual flowers, early cabbages, cauliflowers, &c., to be transplanted out in the garden; as it will not be shaded till the vines have made considerable growth; or vines on the coiling system, which will require bottom heat to grow them, might be plunged. The pit is intended to be filled with leaves mixed with manure, or with leaves alone, as at (*d*). The back and ends may be made of common boards, placed eight inches apart, filled in between the two, with leaves, hay, sea-weed, or dry tan (*e e*); the front may be of thick four inch plank. (*f*) is a shelf, on the back, four feet from the bottom; it should be about fourteen inches wide, and made very strong; on this and the flue, all round, should be placed the pots of vines; those on the flue to be trained up half way the roof of the house, and those on the back shelf to be trained down to meet them, at the same slope of the glass, at the distance of ten inches. The trellis may be made of wire or of wood.

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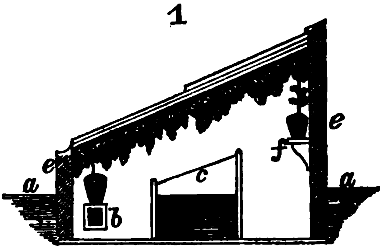

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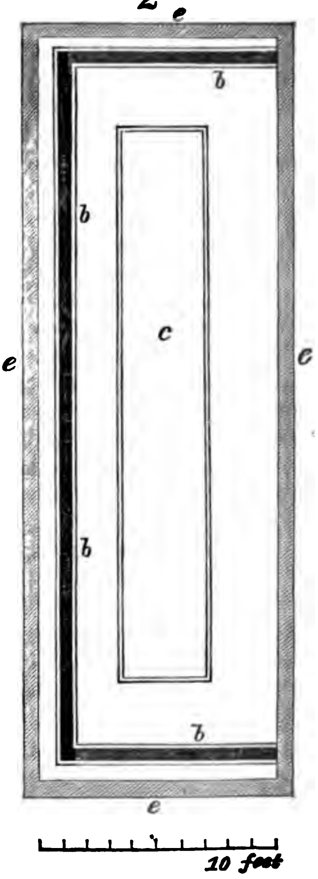


Fig. 2, is the ground plan. Such a house is not intended for forcing in January or February; as it would require more length of flue, and fires to be continually kept burning, which would be attended with considerable expense and attention. One could, however, easily be made for the purpose. In this house it is supposed that, if the vines commenced growing about the first of March, ripe fruit would be obtained from the first of August to the middle of September, according to the earliness or lateness of the variety. If the lower sashes are covered during night, with mats or hay, in March, very little fire would be required to keep up the requisite temperature, which should not be on an average, more than fifty-five degrees the first fifteen or twenty days. The expense of erecting such a house would not be great, and it would contain about fifty pots of vines, which would ripen at least, three hundred pounds of grapes.

Art. II. *On the future Progress of Gardening in America.*

By Grant Thorburn, Esq., of New York.

The improvement of gardening, like that of every art or commodity, necessarily depends on demand and production; these causes operate reciprocally on each other. A nicety of taste in the purchase of vegetables and fruits, exposed in our public markets, will occasion articles of better quality being brought there; and articles of a superior quality, by improving and rendering more fastidious the taste of the purchaser, will ensure the continuance of their production. In like manner, if those who have private gardens, were a little more difficult to please, in selecting a gardener, and in the quality of the produce sent to table, the consequence would be, an improvement in that produce, and more scientific gardeners; and thus, the more scientific gardeners would surprise and delight, by their superior fruits and flowers, and the greater order, beauty, and high keeping of their gardens; and the habits of both parties, accommodating themselves to this improved state of things, would be the ground on which to rely for its continuance. In this view of the subject, the future progress of gardening depends on two causes, viz. the improvement of the taste of the patrons of gardening, and the improvement of the science and art of practical gardeners.

Improvement is the characteristic of civilized man, and implies progressive advances. Men rest satisfied with what they have, when they know of nothing better; and, therefore, one of the first sources of improvement, in the taste of the patrons of gardening,—whether of the tradesman, who has recourse to the public market, or the private gentleman, who is in possession of a garden,—is the increase of knowledge. The wealthy tradesmen of our villages should look into the markets of Boston, New York, and Philadelphia; and, not to mention fruits and forced or exotic productions, let them compare the cauliflowers and salading of the three markets. Those who have once acquired a taste for such salads of endive, as are sold in said markets throughout the winter, would hardly content themselves with barely a supply of turnips and potatoes only.

The ignorance of the proper mode of cooking vegetables, and especially of dressing salads, which exists among the middling classes, is another retarding cause. A French laborer, out of a few leaves of dandelion and wild sorrel,—which may be gathered by the hedge-sides, any where, and almost at any time,—will produce, merely by the aid of the common condiments, what the wives of the greater number of respectable American farmers and tradesmen have no idea of. There can be no great demand for a thing, of which the use is not thoroughly understood; and, therefore, an improvement in the knowledge and practice of cooking must take place, among a certain class, before much can be expected in the quantity, kind, or quality of the gardening articles which they commonly consume.

Yours, GRANT THORBURN.

Hallet's Cove, Long Island, Dec. 23, 1834.

THE above communication from Mr. Thorburn, is the first of a series which he intends to furnish us, as his leisure permits. We are sure they will not be the least interesting portion of our original contributions. The subject which Mr. Thorburn has touched upon, is one of much importance, and one which requires more attention than many are aware of. It is, as he observes, that the rise and progress of gardening necessarily depend upon the improvements and discoveries which are made in cooking the various articles, which are the production of a good garden. The art of cooking vegetables must certainly take precedence of the introduction of them into our markets, to any degree of plenty; for until the wants of the public call for them, there is no sale for any new or rare varieties, however useful in the culinary department. We presume, that as long as Mr. Thorburn has been acquainted and concerned in the business of the seedsman, he has had the pleasure, among others, to introduce some of the most excellent vegetables which are to be found in our gardens. We cannot recal to mind all the kinds which have been brought to notice within a few years, but we would mention one or two, to substantiate his remarks. The tomato, or love-apple, (Lycopersicum esculentum), was, for two or three years, found in our markets in abundance, and could be procured at almost any price, even in the early part of the season. But few knew the method of cooking them so successfully as to be made one of the finest sauces which can be produced from the garden. From these few, however, the knowledge of their value became generally known, and the desire to procure them consequently increased; till now, they are not to be had, in the first part of the season, in our markets, only at a high price; and well repaying the gardener for his trouble in growing them throughout the whole summer. The cauliflower and broccoli, and especially the salsify, or vegetable oyster, (Tragopogon porrifolius), and egg-plant (Solanum ovigerum), are not held so much in esteem as they deserve to be; the last, particularly, being one of the richest vegetables (we might almost say fruits) we have ever tasted. They are easy of cultivation, and may be raised with almost as much facility as the tomato; and when the proper manner of cooking them, so as to render them agreeable and palatable to the taste, shall become as generally known as that of the tomato, they will be one of the first vegetables sought after in our markets. The salsify is also a fine vegetable, being much superior to the parsnip, which it will probably, some time take the place of. Broccoli and cauliflowers have been rather plentiful in our markets till lately; but now, the art of cooking them properly having been acquired, there is not a sufficient quantity to supply the market. This is owing to a better acquaintance with the methods of dressing vegetables for the table, which has created a desire for nicer and more excellent productions. In proportion as the culinary art becomes more complete, choice things will be desired, and the productions of the market garden will be greatly improved, in striving to supply the wants of a more refined and discriminating community.—*Conds.*

Art. III. *On the Propagation of the Grape Vine; with Observations on its Management, Pruning, &c., in the Green-house and Grapery, and the Formation of Vine Borders.* By J. W. Russell.

Ever since the introduction of the grape into Great Britain, it has been highly esteemed, and extensively cultivated. Large vineyards were formerly existing in many places, and wine equal to that of Burgundy, was prepared from grapes growing in the unfavorable climate of England. Its first introduction into the forcing department, was about the commencement of the eighteenth century; and this was done by fires, kept burning in hollow walls, upon which the vines were trained. Since this period, houses for its cultivation alone have been erected, and scarcely a garden can be called complete, unless grapes are one of its principal productions; and it has at once been the pride and boast of the English gardener, to raise to perfection this excellent fruit. Various methods and plans have been suggested, for the proper construction of houses to facilitate their cultivation; and numberless opinions advanced, in regard to propagation, pruning, training and management: but perhaps, after all, not so much depends upon any one method of proceeding, as upon the knowledge of the management of an artificial climate. As the grape vine is now becoming extensively grown, in green-houses and graperies, in this country, and as some observations to aid its successful cultivation may be useful to your readers, I here offer such practical remarks as are the results of a method I have pursued, with scarcely an instance of disappointment.

The vine is propagated from a single eye (or bud) with two or three inches of the preceding year's wood; this method I prefer to any other as yet known by me, for the following reasons: they produce more abundant roots,—grow shorter jointed,—and will, if judiciously treated, come into bearing the second year. Those who wish to propagate the vine from eyes, must prepare for making a hot-bed to forward their growth: I should recommend the bed to be made about the first week in April, rather than earlier in the season; nothing is gained by beginning sooner, as there will be more difficulties to contend with, and the vine, when checked in its infancy, rarely, if ever recovers. An equal portion of oak leaves and stable manure, well blended together, makes the best hot-bed; if oak leaves cannot be obtained, any hard-wood leaves will answer as a substitute. It would forward the work, by mixing the compost intended to make the bed of, a week or ten days before it is wanted for use, into a round heap in some sheltered place. If the ground is level where the bed is to be made, I should recommend as a preventive against water after heavy rains chilling it through, brush-wood or the prunings of trees, laid about a foot in depth, which will remedy the evil. Take the dimensions of the frame proposed to be used, and measure the ground about eighteen inches larger than the frame, driving a stake down at each corner, as a guide to go by; adjust the brushwood accordingly, and commence making the bed, shaking the whole of the manure well together, and beating it pretty solid with the fork as you advance; being mindful to build the bed up square with the stakes, to the height of two and a half, or three feet: this done, place the frame on the bed, and shut up close for a few days until the heat rises; then give a little air, by tilting up the light a few inches at the back, to let the steam escape.. By thrusting a stick or two down in the centre of the bed, it will enable you to ascertain the heat, by taking them out at intervals, and examining them; or, it will be immediately perceived when the rank heat has escaped, by no steam arising from the bed.

The bed should be now covered over, three or four inches deep with soil, still keeping the sticks in the bed, as a guide; as it is necessary for the well-doing of the eyes, to be certain that the burning heat is over, before plunging the pots: the strong heat starts the eyes before any roots are protruded, and they frequently will advance in growth, from an inch to two inches, before the roots are formed. When this is the case, it is a hundred to one against them, if they start thus prematurely: as soon as air is given, the plants that apparently looked so flourishing, wilt down, to rise no more; this is what is generally called damping off. The above items, as regards the temperature of the bed, are equally applicable to the forcing of cucumbers and melons.

It will now be time to begin to prepare the eyes (or buds); this done, select some compost of light vegetable mould, and have at hand as many pots of the first and second size, as there are buds: it will be found to be far the best plan to plant only one eye in a pot, covering it with the mould, about an inch; giving them when finished, a gentle watering with a water-pot, through a fine rose. Now begin to plunge the pots down to the 'rim, in regular order, being careful to keep them as near level as possible; attention must be paid to watering, so as to keep the soil in the pots moist. Too much moisture, or too much drought is equally injurious; the cultivator must take into consideration the two extremes, and endeavor to avoid them, to be successful. It will, perhaps, be necessary in a fortnight after plunging the pots in the frame (or less time, as it depends greatly upon the weather) to add more heat to the bed; this must be done by lining it all round, with a similar mixture of manure and leaves, as the bed was made of. If leaves cannot be easily obtained, stable manure alone, will answer the purpose. Take off the manure from the sides of the bed, all round, with a sharp spade, as close as possible, and be careful to leave the frame secure; then commence lining the beds, mixing the manure that is taken from the sides with that which is supposed to be in readiness: then begin to place the lining, about two feet in width, all round the frame, beating it well with the fork as you go on, whilst the manure is brought half way up the sides and ends; then finish off with some long coarse stable litter, or leaves alone, to the level with the top of the frame, leaving no part of it in sight but the sashes.

When the plants make their appearance, care must be taken not to neglect giving air, every day, when the weather will admit of it; if it should so happen that the wind is sharp and piercing, and at the same time a fine, bright sun-shine, air must be given, either at the front or back of the frame, making use of a single or double bass mat laid over that part where air is given; this will be a means of checking the cold air, meliorating it in some measure, and rendering it more congenial to the growth of the young plants. Covering up the whole surface of the frame with double bass mats, every night after the plants make their appearance, must also be attended to, as long as the nights are cold; covering up when the sun leaves the frame at night, and uncovering when the sun shines on it again in the morning. Some days will be dull and cloudy, with no sun-shine; nevertheless, the frame must be uncovered at the regular time in the morning, as it would be very injurious to the plants to keep them shaded over, during the day; for light is indispensably necessary to their well doing. When the plants are four or five inches high, they should be repotted, into pots of the fourth size (about seven inches in diameter). A similar compost recommended for the eyes will answer; and care must be taken when the plants are turned out of the pots, to keep the ball entire.

Take off the frame from the bed, and also the soil, and fork it up, and level it; then put on the frame, and also the soil on the surface, plunge the pots down to the rim, and give them a gentle watering. The plants should be shaded from the hot rays of the sun, for a few days after repotting, viz.—from about ten in the morning, to two or three in the afternoon. In about a week, the plants will, if well managed, begin to grow freely; give a copious supply of air every day, or the plants will grow weak, and of course be much injured; a little manure water, three or four times a week will make them grow luxuriantly. If the plants begin to touch the sashes, the frame must be raised, to allow them to extend their growth, by propping it up with a few blocks of wood. About the second week in June, the plants should be repotted again, for the last time, into pots of the sixth size, and plunged out in the open air, under a south fence or wall; the pots to be mulched over with some old hot-bed manure, and a stake placed to each plant, about eight feet high, to secure the plants to, as they proceed in their growth.

Yours, J. W. Russell.

Mount Auburn, Cambridge, Dec. 27, 1834.

(To be Continued.)

Art. IV. *Some Remarks on the Difficulty of identifying the Varieties of Fruits.* By R. Manning, Esq.

In examining the different pomological authorities, for the purpose of identifying our fruits, we immediately perceive that their descriptions are so much at variance, that it is impossible to reconcile the different names and synonimes with each other. The writers of these descriptions, indeed, have in most cases seen only the fruits, sent to them, perhaps from a distance, and by persons unacquainted with pomology: whereas, no one should attempt a description, without having seen the bearing trees, and critically examined the leaf, the wood, and the peculiar growth of each tree.

The French, the German, and the English languages are enriched with many books on fruits, some of them of high excellence. For deep research, and accuracy of observation, the old edition of Duhamel is certainly unrivalled among French works on this subject; and by all who have bestowed any attention upon horticulture, has invariably been acknowledged as the standard authority. But it is supposed that many of the fruits described by Duhamel, differ from those of Germany and of the old English authors. A new edition of Duhamel, which should include all the latter acquisitions to this delightful science, was therefore anticipated with much gratification by the lovers of pomology. I fear that their hopes have been, in some measure, disappointed. The new edition (which is in the possession of the Massachusetts Horticultural Society) is certainly a superb work in external appearance, and especially superb in price. It is elegantly printed, and the figures are executed with great splendor. But I regret to observe, that in many instances, the editors have deviated from the first edition, to which, on the contrary, they should have strictly adhered, except in the case of fruits which have been brought into notice since its publication. The high and long established character of the original work, should have preserved it sacred from all interpolations, or supposed amendments, however specious. The new fruits should have been added separately; and in describing them, as well as the wood, the leaves, &c., the editors should have emulated the critical accuracy and precision of the great author, whose labors they were endeavoring to render more extensively useful to the modern public. But so far is this from being the case, that many of the fruits appear to have been sent from distant departments, and are sometimes described, and the names affixed, by those who sent them; and sometimes, being deemed by the editors other and distinct varieties, have received new names. This is the more surprising, as no one is ignorant of the bewildering variety of shapes and colors frequently assumed by the same fruit, in different soils and expositions. By a little caution, all these errors might have been avoided; but caution seems to be no attribute of the French character; and they seldom bestow a thought upon the mere avoidance of error, when their inventive genius can be gratified with novelty, though only in a name.

Compared with the same set of men in England, the French nurserymen and growers of fruit appear but imperfectly acquainted with horticulture, as a science; and they have, besides, been guilty of great negligence, in sending trees to this country; it is not too much to say, that three fourths of all we have received, have come to us under wrong names, though generally ordered as specimen trees. The consequences of these errors have been extremely annoying and vexatious, and are quite sufficient to account for the frequent failure of our own nurserymen to afford satisfaction. Innumerable instances of this nature have been reported, but I will only mention two. Eight specimen trees were ordered, each one of which was to be a distinct sort, by name; and in *name*, it is true, they were distinct; but the *fruit* of each, when it appeared, proved to be the old and well known St. Michael. The writer of this, among many other trees from France, has seven of the same worthless pear, all of which were marked, when received, as distinct varieties. Propagating from trees thus received, without a suspicion of their being other than genuine, is it wonderful or censurable that our nurserymen should fall into occasional errors? But let our experience teach us a salutary distrust of new and high-sounding appellations; embellishments considered by our French friends doubly essential to fruits, which have nothing else to recommend them.

The superiority of the English nurserymen, arises in a great measure, from the impulse imparted by their horticultural society. This society was established many years since, with a view, among other important objects, to correct the nomenclature of their fruits, and to test their different qualities. For this purpose, an immense collection has been formed, comprising all the different varieties of fruits, from every part of the world: specimen trees of each sort have been planted out, and descriptions given only from an accurate examination of the ripe fruit. This society has been greatly instrumental in diffusing correct ideas upon this subject, and in giving to pomological information a precision and method which it had not hitherto possessed. The associated exertions of its members, have naturally effected much more than the solitary labors of preceding writers. Mr. Robert Thompson, the head gardener of the fruit department, in the garden of this society, having studied the French, the German, and other languages, in order to make himself acquainted with every book of merit relating to his profession; and having, besides, the advantage of so vast a collection of trees, as a field of comparison and research, may reasonably be supposed to have accumulated proportionate treasures of pomological knowledge;—to surpass, not *any*, but *all* other individuals in these attainments. Now, precisely what we have long wanted, is supplied to us by the Catalogues of the

London Horticultural Society: they constitute a standard work for reference; a complete text-book, which, beginning in the only way to insure correctness, and continuing with the extension of knowledge, may be consulted with perfect confidence by the growers of fruits. In this publication (the second edition of which appeared in 1831, and of which a volume for 1835 is understood now to be preparing for the press), all the varieties of fruits are described in columns, as fast as the fruit is proved. The first-rate fruits are already numerous enough for any nursery catalogue; and, if we add those of second-rate merit, some of which, in our climate, have already proved very fine, it will afford a collection adequate to the wants of any part of our country. I would, therefore, propose that every nurseryman, who has in view the reputation of his garden, and the satisfaction of his patrons, should correct his catalogue by that of Mr. Robert Thompson. Grafts, of every different variety, are sent by this gentleman, with the most praiseworthy liberality, to all who apply. Let our nurserymen procure these grafts, and establish a specimen tree of each sort; by this simple method, we shall escape all danger of mistake. In our exhibitions of fruits, instead of a wearisome enumeration of authorities,—instead of saying, this is the apple or the pear described by the old or the new Duhamel, by Cox, or any other author, it will be sufficient to say, this is the fruit, the grafts of which were received from the London Horticultural Society, and which is described in their catalogue, under its proper number: for so vexatious are the errors, no doubt unintentionally committed, that it has become absolutely necessary for the purchasers of trees to ascertain the source from which the original scion was obtained,—to institute an inquiry into the pedigree of the tree. The new fruits, which have originated in this country, can be obtained at most of the nurseries, true to their names. The mistakes of which we complain are in the collections of European fruits; and have arisen, not from any neglect of our own, but from that of the European gardeners, from whom we have procured our specimen trees. If we should disregard all other authorities, and adopt the catalogues of the London Horticultural Society as our sole standard, any person desirous of making a collection of fruits, would do it with perfect confidence that his trees would be not only true, but precisely the same which are known and cultivated in Europe, under the same names by which he receives them; and the same fruit would no longer be distinguished by one name in New England, by a second in New York, and by a third in Pennsylvania.

R. MANNING.

Salem, Jan. 10*th*, 1835.

Art. V. *Observations on some of the Insects which infest Trees and Plants; with Hints on a Method of their Destruction.* By B. Hale Ives.

Natural History, and particularly that branch of it relating to the *insect world* is so closely allied to horticulture and rural affairs, that your Magazine would be considered incomplete, and not true to its title, did it not occasionally treat on the benefits or inconveniences we experience from these minute, yet important animals in the economy of nature.

During the three past years, I have paid some little attention to the science of entomology, and studied the habits and economy of many of these little "pilgrims of summer;" more particularly those which are the bane of the fruit and flower garden, and on which man places his foot without compunction.

All must be familiar with the common garden caterpillar, and the injury done by it to our fruit trees; yet few are aware that it is in their power to annihilate them, and with little labor, even in the dreary months of winter. Many plans have been suggested and put in execution, for the destruction of the worms after they have left the egg and commenced their ravages. They are then brought into notice by a web-like covering, which they spin in a fork of the trees, to protect them from rains, and the dews of night. The most efficient plan yet invented, is that of our late townsman, the Hon. Timothy Pickering, which consists of a spiral brush, attached to a pole, by which they are dislodged, after they are colonized upon the tree.

The following, which I extract from my journal of 1832, in relation to this pestiferous caterpillar, with a few subsequent observations, may possibly prove of use to some reader of your highly useful Magazine.

"*February* 26.—In a walk this morning, I found two heavy cocoons of the *Phalæna géntia*, upon the common alder (*Alnus glutinòsa*), and a fine live specimen of the winter moth (*Cheimatòbia vulgàris*). On returning through the apple orchard of —— U——, Esq., I perceived nearly all the trees speckled with occasional dead leaves, adhering to the branches so firmly as to require considerable force to dislodge them. Each leaf covered a small patch of from one to two hundred eggs, united together, as well as to the leaf, by a gummy and silken fibre, peculiar to the moth. I gathered a few bunches of these eggs for a more careful examination, and deposited them in my cage of cocoons."

These eggs proved to be those of the moth of the orchard, or garden caterpillar, so well known to gardeners, and which are hatched soon after the leaf buds expand. In March, 1833, I visited the above named orchard, and, as an experiment, cleared three trees, from which I took *twenty-one* bunches of eggs, which would have produced as many colonies of worms. The remainder of the trees I left untouched until the 10th of May, when I found the worms were hatched from the egg, and had commenced their slow, but sure ravages. I watched them, from time to time, until many branches had been spoiled of their leaves, and in the autumn were entirely destitute of fruit; while the three trees which had been stripped of their eggs, were flush with foliage, each limb without exception, ripening its fruit.

My observations and experiments were not confined to the apple; many other trees are attacked by a caterpillar whose habits are similar to the one above named. From a small butternut tree in my own garden, I took seven bunches of eggs, in the spring, and the subsequent season my tree was wholly exempt from the worm which had destroyed a great part of the leaves, the two previous summers.

These observations may not be new, yet I have never seen instructions from the pen of any one, for destroying them in the egg, but always after they were hatched, and had commenced their depredations.

Now I am sanguine in the belief, that a garden or orchard can be cleared of these deposites of eggs, in one tenth part of the time usually taken to clear them of the worm, by the brush method; for it must be recollected, that these deposites are always made visible to the eye, by the natural covering of a leaf; never in one instance, have I found them otherwise.

Small trees can be kept clean by the hands, while those upon the larger trees, out of reach of the hand, can be easily destroyed by a little straw or flax, tied on the end of a pole, then set on fire, and applied to the eggs, which instantly expand and burst with a considerable crackling noise. These eggs are not affected by a cold of forty or fifty degrees below zero, while an application of heat as before named instantly destroys them.

I do not call the attention of your readers to this common worm, as being anything new to them, but merely to the fact that the ravages of this caterpillar can be prevented in the above mentioned simple manner, and at a period too, when time can be better spared for the purpose, than in the busy month of May.

There are other noxious insects, whose habits ought to be better known by all who have a fruit garden, particularly the peach borer (*Ægèria exitiòsa*), and the *Curculio* of the apple, green gage, &c., which does such incalculable injury to our good fruit.

Should you consider the few hints given of service, and meet your approbation, you may possibly hear from me again on the best method of preventing the premature decay of our peach trees by the insidious borer.

Yours, B. Hale Ives.

Salem, Jan. 10, 1835.

We shall be extremely happy to receive a continuation of such very valuable remarks, for we have long been aware that not sufficient attention has been given by horticulturists, to that branch of natural history which relates to those insects which cause the gardener so much vexation, trouble, and disappointment, season after season. Merely destroying the larvæ every summer, so imperfectly as is generally done, will never much lessen the innumerable quantities which swarm on almost every tree and shrub. The manner of picking off the eggs as hinted by Mr. Ives, is undoubtedly new to most of our readers, and we hope that the experiment will be further tried, and the results of the success communicated through our Magazine. We should be glad to receive communications on the subject from any of our friends. Mr. Ives has paid much attention to entomology, and has a large collection of insects: he has even succeeded in raising some species of insects for his cabinet, which are rarely to be found in our gardens.—*Conds.*

ART. VI *Remarks on the Management of the Gladiolus natalensis, (called by some psittacinus.)* By S. SWEETSER.

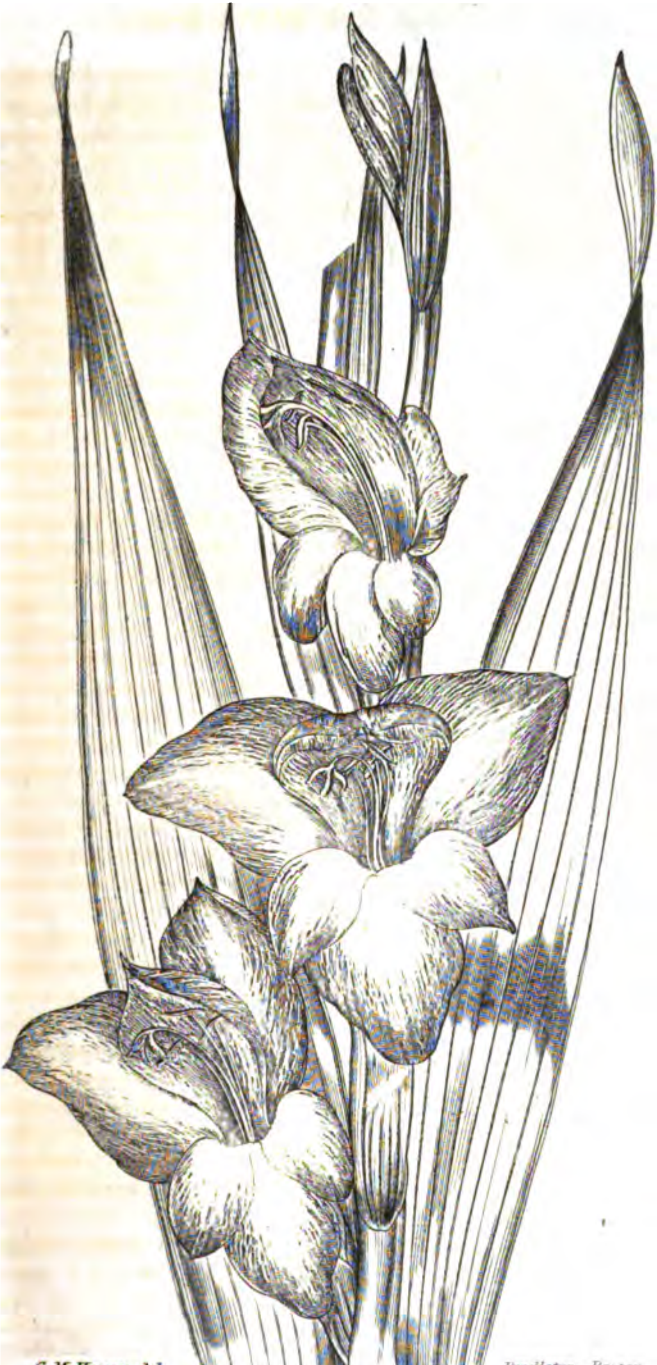
GENTLEMEN,

You having requested me to give you an account of the manner in which I treated the Gladìolus natalénsis, which I presented at the Massachusetts Horticultural Society's grand exhibition last September, and mentioned particularly in your report in your last number, I cheerfully comply with your solicitation. Although not much of an adept in the delightful and agreeable art of horticulture and floriculture, and especially, not much used to communicating the results of my experiments to paper, yet, knowing your great desire to procure all information possible that may be useful or interesting, I willingly contribute my mite towards advancing the pursuit of this favorite science.

This species of Gladìolus I think to be one of the most beautiful which have been introduced into this country, and it certainly may be considered one of the most valuable, because it is decidedly of easy and simple cultivation;—It also increases very fast, and it will undoubtedly, before long, not only be one of the chief ornaments of the greenhouse and parlor, but will become as common in the garden parterre, as the rich Georgina.

The offsets from the bulb which I flowered last season, large and small, amounted to nearly fifty; and I have no doubt but that they may be all grown so strong this year, as to flower vigorously the next. The other species of the Gladìolus which are generally grown, I have not given much attention to, but I have now planted from two to three dozen of each; and should you wish, may communicate to your numerous readers the coming season, some observations on the success of my management.

As I have observed above, the culture is very simple and will require but a few words to detail the method. In the month of April I purchased two bulbs, and set them in small pots about four inches in diameter, filled with a prepared compost, consisting of about one half peat, and one half loam, with a small por-


C. M. Hovey del.

Pendleton, Boston.

GLADIÒLUS NATALÉNSIS.

tion of sand, and placed them in the greenhouse. (I have no doubt a warm room, or a hot-bed, in which the heat is nearly exhausted, would answer the same purpose.) They remained in this situation, making apparently very little progress in their growth, till all danger of spring frosts and chilling winds were over, when one was turned out of the pot and plunged in the border; the other remained in the pot, which however, was shifted once or twice during the season. The latter did not flower, owing undoubtedly to being confined in too small a pot. The former, a few days after its removal grew astonishingly fast, and by the first of September it had thrown up four flower spikes, to the height of nearly four feet. About the twelfth of the month it began to open its gorgeous blossoms, and at one time, I counted seven fully expanded, on one spike. The exhibition of the society being near at hand, and knowing that the committee wished to collect every thing beautiful, and more particularly every thing new and rare, and fearing that mutilating the plant would destroy its elegance, I took it up, placed it in a large pot about ten inches in diameter, and set it in a shady situation until the seventeenth, when it was sent to the exhibition, with a few other varieties of plants. Its removal to the pot contrary to my expectations, did not injure the blooming in the least, every bud opening in full perfection. The soil, where it was turned out of the pot in the spring, was a light sandy loam, without having been enriched; the exposure of the plant to the sun was only until mid-day, it standing partly under the shade of a tree; and on a sandy bottom, I gave it large quantities of water every eve succeeding the hot days of the season; and from this circumstance of its situation, I infer that it loves a loamy rather than a peat soil, as is generally recommended in the English publications. The bulb was set only an inch under the surface of the soil, and the flower stems as they advanced, were tied to to small neat sticks, painted green. After the flower stems had withered away, they were turned out of the pots in a warm aspect, placed upon their sides (to prevent wet from penetrating the heart) four inches under the soil, where they remained till the approach of hard frosts; when they were taken up, cleaned of their old dead leaves and fibres, wrapt up in papers, and put away in a dry room.

Yours, S. Sweetser.

Cambridgeport, Jan. 8th, 1835.

We place much value upon the above communication of Mr. Sweetser, as it is the actual result of the practice pursued by him in flowering this species, spoken of in our last. We think the Gladiolus one of the most beautiful genus of the whole natural family of Irideæ, and we believe, that when the cultivation of all the species is better understood, they will become equally common with the Tulip, the Hyacinth, and the Narcissus, to which they will not yield in the elegance, and diversity of their colors. In England, the Hon. and Rev. William Herbert has given the whole family of Irideæ great attention, and particularly the genus Gladioli; he has raised many beautiful hybrids, which are now to be found in every collection, where choice kinds are desired; and so much have they been admired, that the old species, from which they were originated, have almost ceased to be cultivated. The byzantinus, cardinalis, and communis, with its varieties, are the only kinds we have ever observed in the gardens around Boston, and we are not aware of the existence of others at present in the country. Next season we hope to have the pleasure of showing some of the new varieties raised by Mr. Herbert; we are expecting some before long, and perhaps many will be glad to hear that they are likely to become denizens of our own greenhouses and flower gardens.

The accompanying plate is one we have copied from a painting we executed last autumn from the very plant which is the subject of Mr. Sweetser's communication. It represents only the top of a spike, which numbered seven expanded flowers. Having seen a description of this species in the English floricultural publications, we intended importing some of the bulbs; but being at Mr. Thorburns in New York, last spring, he informed us that he expected a small quantity, though very rare; we engaged one or two dozen of them, and had the pleasure of introducing it into this vicinity. We received a few months since several dozen bulbs of this species, with others, and expect a large quantity in a few weeks.—*Conds.*

Art. VII. *On the Cultivation of Lobelia cardinalis, fulgens, splendens, syphilitica, and speciosa.* By the Conductors.

These five varieties of the showy genus Lobèlia, we succeeded in growing very beautifully last season. Some of the plants were *five feet* in height, and were covered with a profusion of their rich and brilliant flowers. They are a great ornament to the garden, as they can be placed when grown in pots, in any situation, and in some parts where no other species of plants will flourish to any degree of beauty. Under the shade of shrubs or trees, we have found them to preserve the elegance of their blossoms for a much greater length of time, than when set in sunny places. And we may suppose that their natural habitats would be in the shade, as our native species are mostly found growing in low, damp, and sheltered situations.

When the fùlgens was first introduced into Great Britain, it sold at a guinea a plant: it may now be bought for two or three shillings. The common cardinàlis which flourishes by the sides of little brooks and in wet places in our vicinity, throwing up its glittering spikes of flowers, was thought by Justice, an old and celebrated florist, as "a flower of most handsome appearance, which should not be wanting in curious gardens, as it excels all other flowers I ever knew, in the richness of its color."

The fùlgens and splèndens are natives of Mexico, and are not yet very common, though it seems astonishing that their great beauty should not have found them a place in every flower border where it is desirable to gather all that is choice and rare. They are tender plants, and require the protection of a frame or green-house during the winter, which may be perhaps, one reason that they are not to be seen more plentifully in our gardens. The speciòsa is a new and very late introduced variety; it was found growing among the other varieties in a flower border in Scotland, and is supposed to be a hybrid between syphilítica, and either fúlgens, or cardinàlis. It has never flowered in this vicinity till last season; and its rich, purple-tinted blossoms form a fine contrast with the bright scarlet ones of the other varieties. The syphilítica is a native of Virginia, with flowers of a vivid sky blue; and when all five varieties are grown strong in pots, and plunged in the border in separate masses, they form one of the most magnificent objects to be seen among the whole range of herbaceous perennials.

The manner in which we treated them to flower in pots, was as follows:—During February (about the middle of the month) we took young plants, that had been potted off in small pots (No. 2, about four inches in diameter) the preceding autumn, and had been protected in a cool part of the green-house, and placed them where they received the influence of the sun and light, in a warmer situation. After they had remained there a few days, we removed them to a hot-bed, where the temperature was kept to about seventy-five degrees during the day, and sixty-five degrees through the night; the pots were plunged in the back part of the bed up to the rims, and the plants were constantly watered. Air was given in considerable quantity to prevent their drawing up weakly, which would have materially injured them. In this situation they grew very rapidly, and formed strong plants; as soon as the pots were filled with the roots, which was in about six weeks (the first of April) after they had been placed in the hot-bed, they were repotted into pots of the third size, about five and a half inches in diameter, and again plunged in the soil of the bed, somewhat nearer the glass than before, that they might receive the full influence of the air that was admitted. They were now watered more freely, with water warmed to the temperature of the bed. In four or five weeks (about the 10th of May), they were again shifted into pots of the fourth size, about seven and a half inches in diameter, and replaced in the hot-bed. The plants were now very strong, with large, broad, deep green, vigorous looking leaves, and with roots thrown out above the soil, all round the base of the stem, eager to get nourishment and food. The flower stalks also began to appear, and soon reached nearly to the glass. As soon as they were thoroughly rooted after the last shifting, they were taken from their situation, and removed to the warmest part of the green-house. If there is no green-house, they should be placed under a south wall during the day, and sheltered during the night. The flower stems advancing rapidly, and the pots becoming full of roots, they were shifted for the last time into large pots, of about ten inches diameter (sixth size), in which they were intended to flower. They now required large quantities of water, and when they began to open their blossoms, pans were placed under each pot and kept constantly filled. They were also removed to a rather shady and cool situation, where they displayed their rich and brilliant blossoms, till the late frosts of autumn checked and retarded their growth. The soil we found best suited for them, was composed of equal parts of loam and bog earth, or leaf mould, to which was added river or pit sand in the proportion of one fourth. The pots should be well drained with pieces of old broken pots or brick-bats so as to admit of their being more easily repotted.

ART. VIII. *A few Remarks on the best Method of obtaining double Flowers of the Stock and Gilliflower.* By J. W. RUSSELL.

PERHAPS there are but very few plants more universally admired than the Stock, and Gilliflower; as an annual plant, there is scarcely any that is more worthy of a situation in the flower-garden than the Ten-week Stock. I suppose there are but very few persons, who have not noticed in gardens generally, a plant with double flowers set between two single flowering ones. If the observer should have had curiosity enough to inquire the reason why the double flowering plant was thus set between the single ones, it is very probable that the answer would be, this is the system I take to procure good seed; what is meant by good seed is, seed that will produce plants with double flowers. This idea is an old one, and of course will have prejudice in its favor, which is very difficult to eradicate. I know of no other way to convince those who have any faith in this process, than to show them plainly that there is no foundation for it whatsoever. If any person will take the trouble to examine a flower of the double stock, they will I think be perfectly satisfied, and come to the conclusion, that there is not any part of fructification to be found, in a flower of the double stock, that could be of any use in the fecundating of the single flower. The fact is, the single flowering plant is perfect of itself, and needs not the aid of any other plant to produce good seeds. A plant of the single white and red may be planted near together, and by so doing, the pollen of each plant will very probably get mixed, and the cultivator may reasonably expect to have an intermediate variety; then, by planting the intermediate variety with the white, or red, &c., an endless variety could be obtained. By following this process five or six years, every intermediate color between black and white could be procured. Those who wish to get those varieties of color in the Stock, must not expect to succeed without paying great attention to the colors of the flowers that are intended to be mixed; for the greater the contrast in the color of the flowers intended to produce seed, the greater is the hope of success.

I should recommend to those who wish to procure good seed, to thin out the flower stems when the plants are in flower, not less than one half, being careful to leave the strongest for seed. Where it is the practice to sow the Ten-week Stock annually, in beds in the open ground, either in drills or at broad-cast, I shall recommend a process which is rarely if ever attended to: when the plants are two or three inches in height, cut under them with a sharp spade about three inches deep, so as to raise them up a little; this will be found to be of great service to the plants. Every one knows that the Stock is very deficient of fibrous roots, and a great many plants are lost, especially if the season is dry at the time of transplanting. By cutting the tap roots, it will remedy the evil; it being a means of making the plants protrude a large quantity of mouths or feeders, and consequently grow more stocky and bushy. By raising the plants carefully with a trowel at the time of transplanting, and this judiciously done, there is but little fear of success.

J. W. Russell.

Mt. Auburn, Cambridge, Jan. 13, 1834.

Art. IX. *Cultivation of the Salvia splendens, fulgens and mexicana.*

By the Conductors.

These brilliant ornaments of the flower-garden (particularly that old inhabitant the splèndens), are of the easiest cultivation. The fùlgens is of late introduction, flowering we believe in the vicinity of Boston for the first time, last season. The mexicàna has been also lately introduced. They are equally ornamental in the green-house, as well as the pleasure-ground. The fùlgens is not so free a bloomer as the splèndens, it requiring more heat: the mexicàna is of very strong and tall growth. They should all be propagated as follows:—take off the cuttings at a joint, about four inches in length; trim off the lower leaves, and insert them in good rich soil, composed of loam and leaf mould, equal parts, in pots of about six inches diameter, ten or twelve in a pot. If this is done during the months of February, March or April, they will require the aid of a hot-bed to make them strike freely. After they are rooted, which will in general be in about a fortnight, they should be potted off into pots called No. 1 (about three inches in diameter), and again plunged into the bed till they are well established. When the roots fill the pots, they should be shifted into the next size; this should be repeated till the weather is warm enough to turn them into the border. They should then, as they grow, be tied to a stake, as they are very brittle, and liable to be broken by the wind. They will thus treated, bloom finely during the autumn; the splèndens with its long spikes of glittering scarlet, the fùlgens with its dazzling crimson, and the mexicàna with its rich blue flowers.

REVIEWS.

Art. I. *Reviews and Extracts of Works on Horticulture.*

1. *The Horticultural Register, and General Magazine of all useful and interesting Discoveries connected with Natural History and Rural Subjects.* Conducted by Joseph Paxton, F. L. S. H. S. In monthly numbers, 8vo. 1s. each. London. 1834.

On the Culture of Vines in Pots. By John Mearns, Gardener to his Grace the Duke of Portland, Welbeck, Notts.

I am pleased to see so liberal a spirit evinced, in imparting to the world the results of attentive observation and long practice, in papers on the cultivation of grapes in pots; by which means, upon a very small scale, and at a trifling expense, a succession of fine fruit can be preserved nearly the year round.

Any of what are termed Dutch pits, with convenience to manage them inside are very suitable, and most economical for forcing the grape in pots. For early forcing, I recommend such as Fig. 3 and 4. Such can be constructed of posts, or bricks if something more substantial be required. Fig. 3 has a lining of hot dung in front, and under the stage. Fig. 4 has a lining all round the boarding. The grapes are to be trained to a trellis, either of wire, laths or osier rods, *twelve inches from the glass;* it will answer the purpose as well as the most expensive pit.

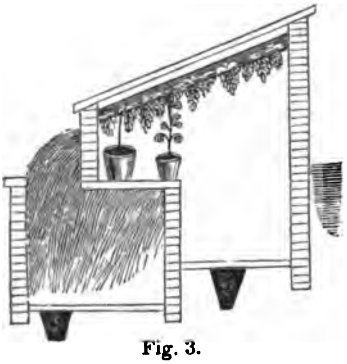


Fig. 3.

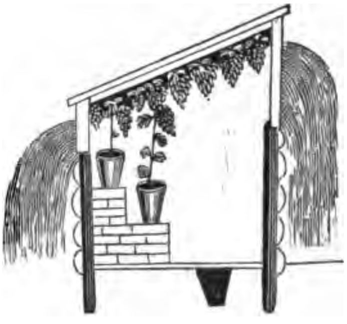


Fig. 4.

Nearly twenty years have elapsed since I first witnessed grapes successfully cultivated in pots, by a most enterprising horticulturist, Mr. Buck, gardener to the Hon. Greville Howard, Esq., Ilford, near Litchfield. They were, indeed, very fine, and very young vines, in small pots. Ever since that time, I have more or less practised it, and never found it difficult to have plenty of fine bunches and fine grapes; besides being the best tasted I ever met with. I have annually produced three dozen fine bunches of grapes, and in their early stage, have picked off four times the number, from White Muscadines; and those growing only in fourteen inch pots for *eight years.* They were six years old when first potted, and during the eight years they neither received fresh soil, nor what is called manured water. They were watered as required, with soft pond water, such as is supplied from the watering, or *floating* of meadows. After it has passed off, it holds, in solution, *and in its most limpid state,* all the food which most plants require, and is only such food as they are capable of taking up by their spongioles, or digesting by the system. They are neither stone nor earth eaters; they are much more pure feeders than animals. It is obvious that water, in its meanderings along the rich surface of meadows, and whilst depositing its grosser sediment, as it is filtering through the herbage, takes up in its progress, all the food that vegetables need. It becomes strongly impregnated with the fertilizing exhalations from the earth, and with the various important gases evolved by the constant progress of decomposition constantly going on at the *surface*, as well as by those subtile nutritious particles continually afloat in the atmosphere and which are borne down by attraction, gravitation, wind, rains, and by dews; where they lie upon the surface till dissolved and taken up by the fluids as food for vegetation, and are borne along in abundance by the surface waters, where it is fitted *for our important purposes.* With such water I supply my vines plentifully at a time, but never more than *once* a day, and then, not unless they stand in need of it, which is obvious from the plants inclining to flag for want of food. I have then a sure criterion that I can give them plenty without danger. In the last stage of swelling, they take up much, and if judiciously supplied, will swell off to a fine size, provided plenty of air be judiciously admitted to them, and a due vapor be kept up whilst the pit is closed. It is very important to give large portions of air to every plant under forcing; nearly taking the lights off in fine weather, and closing them early in the afternoon; but at bed time, admit a circulation of night air, and keep up the required temperature by a little fire, or a stronger lining. Early in the morning close up. leaving only sufficient at the top to allow the condensing vapor to pass off; let it thus remain till the glass rises from seventy to eighty degrees, before more air be given. Then give it at two or three different times, if the day be fine, till the pit or house is as much exposed to the influence of the atmospheric air as it conveniently and safely can be.

I think it novel and of much importance to those who have sweet water vines, Miller's Burgundy, Muscadines or others which are common upon walls, to know that they can cut off branches from them, and have a good crop of fruit the first year in pots. Take a cutting of any length, from five to twenty feet; no matter if at the extremity, it be five or six years old; drain the bottom of the pot well, coil the branch *round and round* the inside of it, from two to five or six times, according to the length of the branch; and leave above the pot a length of stem suitable for the accommodation. Then fill up the pot firmly, to within an inch of the top, with a good mellow compost, and place a neat stake to steady the shoot in the direction most suitable; *and to prevent evaporation, and to encourage roots all over the stem,* wrap it up neatly with moss, *and keep it constantly moist, till the grapes are safely set.* Then clear off the moss and roots, and encourage those in the pots by proper warmth and shifting; and, if it can be done, they should be placed in a bottom heat till the grapes are set, at least. I have had fine and well perfected grapes from a Muscat cutting this season, treated as I have described, and those from a cutting ten feet long; as well as from a Black Damascus and Black Tripoli, the berries of all being finely swelled, and of fine flavor.

The vines are now extremely fine, and the wood well prepared for a plentiful crop next season. The eyes are as fine as I could wish them; the wood is from one inch to one inch and a quarter in girth. I have one vine coiled into a pot, but not more than eight or nine inches above it, which has got a young shoot, twice stopped, eight feet long, and is one inch and a quarter in girth; if I had not stopped it, I have no doubt of its being from twenty to thirty feet long; but should not so certainly have accomplished my object, in having it a fine bearing shoot for next season, which it now promises to be.

It is known to the experienced grape-grower, that his only certainty of fruit buds depends upon such shoot springing from an eye of the previous year; if that be not attended to, and it spring direct from old wood, without a previously prepared eye, however fine the shoot may be, it is generally abortive. This can be obviated, and *a year may be gained* by cutting the shoot back, after it has made six or eight eyes, to the second or third. Pull off the laterals as soon as they appear, and encourage the uppermost main eye to break; by such an act, fine bearing wood will be produced for the following season; but if weak, it must not be permitted to run to too great a length till its top is pinched off, so as to strengthen the wood and eyes for next year, but not so as to excite such eyes into action, unless desired. For, if so, such as the Verdelho and others of the small and free bearing sorts can be made to *fruit the same season*, when the main eyes are excited, and yet not affect them for another year's fruiting. I have at this time two crops of grapes upon what was this spring an old sickly stump of a Verdelho vine in a small pot; it had neither roots nor wood younger than three years; and I think if I were to excite some more eyes to spring, by toping, I might have a third and even a fourth shew of fruit; and yet ensure a good crop next season.—*Hort. Reg. for Nov.* 1833.

Propagation of Vines on the Coiling System. By JOHN MEARNS.

I am anxious that the season for procuring plenty of grape vine branches, for coiling into pots, as I recommended in vol. ii. may not be allowed to pass by. It is a most important thing to be able to put in a rootless cutting at this time, and so on till March or June; and to insure a fine crop of grapes the same season; even to twenty or thirty bunches on one vine in a pot, as the sorts may be. Although the shoots which I have yet put into action are taken from very weak vines, I have some with from ten to twenty bunches upon them; and am not in the least apprehensive but they will all set, and swell off to a fine size, and ripen very superior to those produced by any other method. I do not mean to say that they will ripen better than if upon a previously rooted vine, if well prepared; I only mean so far as the bottom heat is concerned. The great advantage of the coiled branch, is the extraordinary space of time gained over the single eye system, or the usual cuttings, or even the usual layer.

It may suit the nurseryman, who wishes to obtain as many plants as he can from a single shoot; but that is not what the grape-grower desires: his object is very different; he aims at producing the greatest quantity of fine grapes; and under the most disadvantageous as well as advantageous circumstances, in the least possible time. By my method I shall introduce vines into any farmer's garden in the kingdom, where none had previously been; and at the expense of little besides ten or twelve lights of glass, will insure him from 500 to 1000 fine bunches of good grapes the first season! If any one can boast the same, the fact has never been laid before the public, else it is likely I should have seen it. I go thus far, on purpose to raise a curiosity, and to excite every degree of emulation, knowing, that if such can be excited, the system will very soon discover itself to be most important to the country. The successful cultivation of the grape is certainly one of the simplest branches of the art, both in pots and in borders; if a vine be left to itself, it will soon become fructiferous, after having been for years under the most rigid discipline to little purpose. A vine excited to a high degree of luxuriance, is neither the most fruitful, nor produces the finest or best grapes. I have seen Hamburghs, from three to six and eight pounds weight each bunch! the vines comparatively weak, and vine border very shallow, and by no means rich!

As curiosity will be created by such a remark, I beg to state, that such grapes were repeatedly produced by a Mr. Minnett, formerly gardener to Mrs. Powes, Berwick House, near Shrewsbury.

I have there seen bunches of Hamburghs, from fifteen to sixteen inches long, and from eight to ten inches across the shoulders; the berries all of a perfect black, as close as they could grow together, and the size of a boy's large marbles.

I have coiled into pots this season upwards of a hundred branches; forty and more of which I have got into action. I shall continue to introduce others till the middle of June; if I can *starve* them into dormancy by cold bleak exposure, or by burying them in clay-cold murkey graves or caves! or by being sunk under a wall on a north aspect. I am begging of all my friends, the long branches which they cut out in pruning; and as far as Somersetshire, Worcestershire, Staffordshire, &c. &c., so that I expect, in a short time, to have a stock of plants sufficient to produce one thousand bunches the first season.

I should not have sent this account to you at this time, had it not been my anxious desire that the public should be in possession of it, ere the season for finishing vine pruning is past. It is certain it soon will be, and then one year's enjoyment is lost; and that I am sure would be a year of vexation to many of your amateur readers. That such may not be the case, I most anxiously beg of you not to lose a month; but, if it can be inserted in no other place of next Register, let it be inserted as a postscript.

POSTSCRIPT.—*More about coiling Vines.* By Mr. MEARNS.

I hope to see a postscript attached to the February number of the Register, upon the coiling system of grape vines, as I should indeed be sorry if your readers were to lose a season so important in the cultivation of that desirable object. Put in your cuttings of young wood, in coils of three, four, to five feet, blinding all the eyes except the two uppermost. I choose to leave two eyes till the finest gets the lead, and is safe, for fear of accident to one alone; I then slip the weakest off. If placed into a bottom heat, and the eyes be buried about an inch or two in the pots, in the course of coiling, by the time the best eye appears above the soil, as strong as the bud of a fine asparagus! The whole coils beneath will be completely occupied with young active roots; and by the time the shoots are four feet long, the pot will be a perfect mat of those eager feeders. Then shift and top the shoot, and never leave on any laterals; plunge as before into a fine bottom heat; and encourage the main topmost eye alone to push, and lead it on, but without laterals, till it is again four feet long; when, if the pot is full of roots, shift, top it as before; and encourage again the uppermost eye only to start; and by the time it is another four feet, if not over-potted before, it will require a third shifting. If required, you may stop at every four feet, five or six times; but three shiftings will be found enough for the season; and you had best not suffer it to reach above from twelve to twenty feet of clear bearing wood. At the end of the season, you will have shoots one inch and a half diameter, and with fine bold eyes, and full of fine set bunches for the next season!

You will readily perceive, that by such an early and abundant accumulation of young vigorous roots, and by such a top and bottom management, it is no extraordinary miracle to have every cutting a fruit bearing shoot at one season's growth; and by a proportional coil of large older wood, it will be equally obvious to you how readily such will produce a fine crop the first season!

I expect to have the pleasure of a visit from you soon, when I fancy you will be gratified as well as satisfied with its success, and extraordinary simplicity. I think you must be well aware of its great importance to the world; and if ever such a method had been previously adopted, it would have been noticed long ere this, and its importance would have caused it to be generally adopted. As such has not been the case, I think it must be allowed to originate from me.

The extraordinary progress of my grapes upon the coiled vines, placed in a bottom heat, astonishes every one. In another season, when I have got my wood early ripened, I intend to start some in October, and to have plenty of fine ripe grapes by the middle of February. I have some at this time half grown, the branch being only cut from the vine, and placed in bottom heat 20th of November! "Can such things be?" yes, easily and simply so. I intend to keep some coilers as late as the middle or end of July, before they are excited, and then to place them in a bottom heat. The fruit, by doing so, will be perfectly ripe before the dull weather of autumn sets in, but not so with the wood: by which circumstance they will retain the leaves vigorously through the winter, and consequently the fruit will retain its plumpness till April or May!

You will now say this is going too far, but it undoubtedly may be done. New ripe grapes in February, and plenty of old grapes till the end of June! [January]. There is little beyond the power of man, if he will but exert those faculties with which God has endowed him.

It has been stated, by a contemporary author, that it is our own fault if we do not make ourselves kings, however low our rank in society. To a certain extent, he is right, although at a transient glance, it may appear a wild expression, and a moral impossibility; but such things have been and still are! I admire those apparently wild rhapsodies; for I am sure, however extravagant they may appear, a young man cannot read them without reflecting on them, and if he does reflect, he cannot help being the better for it. If he has energy in him, all his powers will be aroused into action, while he says to himself, "are such things possible, and am I, drone-like, lying a burden, rather than an useful member of society? I feel that I have common sense; then let me arouse those inert powers, and if I do not rise to be a king, I will strive to be a man, and fill up that blank in creation for which I was intended, by being an useful member of society.

If we strive to be useful and to please, and this is all that is exacted of us, we shall add to the comfort of those around us, as well as our own.—*Hort. Reg. for March*, 1834.

ART. II. *Barrett's Horticultural Register and Gardener's Magazine.* Edited by T. G. FESSENDEN, Esq. In monthly numbers. 8vo. No. I, for January, 1835.

This is the title of a work we have received, and which appeared about the same time of our Magazine. We mention the contents of this number, and shall at some future time, notice the work more particularly.

"We have commenced, and hope to establish the present work, to serve as an *accompaniment* to the New England Farmer, that the two publications might embrace the topics of most interest, as well to field cultivators as to those whose tillage is mostly or exclusively limited to gardens."—*Introduction.*

CONTENTS. Introduction. Importance of Cultivating good Fruit—(consisting of an extract of an article, translated by Gen. Dearborn, from the *Annales de L'institut Royale Horticole de Fromont*, and published in the N. E. Farmer, vol. ix. p. 189, and a List of Fruits, by the committee of the Massachusetts Horticultural Society, also published in the N. E. Farmer, vol. xii. p. 250). New Fruits. Cultivation and Protection of Plants. On the Grape Vine—(this is from our excellent and valuable correspondent Wm. Kenrick, Esq., but the substance of the communication has been published in the N. E. Farmer—translated from a French work by the Hon. John Lowell—vol. vi. pp. 73, 118, and by Mr. Kenrick, in his useful work, the New American Orchardist). Eschschóltzia califórnica. Hyacinths, and other Flower Roots. Clárkia pulchélla. Kálmia latifòlia. On the Cultivation of Celery.

Extracts—(consisting of ten articles from Loudon's Gardener's Magazine).

MISCELLANEOUS INTELLIGENCE.

Art. I. *General Notices.*

Action of Tannin, and some other Substances, on the Roots of Plants. By M. Payen. It has been repeatedly stated that trees soon die when the roots come into contact with the remains of the roots of oak trees cut down near them. This was supposed to be owing to the action of the tannin in the oak roots. M. Payen, after making a number of experiments on the subject, arrived at the following conclusions:—1st, Tannin, even in small quantity, acts deleteriously on the roots of certain plants; 2dly, Acids, in small proportions, are hurtful to germination; 3dly, Alkalies, in small quantity, are favorable to the progress of vegetation; 4thly, The neutralization of the acidity developed during germination hastens its progress, and favors the ulterior developement of the plant. These experiments account for one of the useful effects of lime or vegetable ashes, and of calcareous marl; and also for the unfavorable influence of alkalies used in too great quantity, or unequally distributed.—(*Journal de Chimie Medicale*, April, 1834, as quoted in the *Lond. and Edin. Phil. Mag.* for August, 1834.)

Art. II. *Foreign Notices.*

ENGLAND.

The Metropolitan Society of Florists and Amateurs had their grand show of georginas, roses, flowers, flowering plants, &c., at the Surrey Zoological Gardens, on August 13 and 14. The assemblage of company was most numerous, not less than 10,000 or 12,000 persons, it is stated in the newspaper reports, having entered the gardens in the course of the first day. The show of flowers was more than usually magnificent. Silver cups, and volumes on the science of horticulture, were the prizes awarded to the successful candidates by whom the best flowers had been reared. The names of the nurserymen to whom the cups were adjudged were:—Messrs. Chandler, Widnall, Harding and Wilmore, whose georginas were preeminent in magnificence and splendor of color. Mr. Brown was also the winner of a silver cup; and, among the amateurs, Messrs. Shepherd, Crowder, Lee, Alexander and Salter obtained prizes. The prizes for the best pelargoniums were given to Mr. Hill and Mr. Gains; and Mr. Hopwood, Mr. Rivers and Mr. Redding were particularly successful in obtaining the prizes for collections of cut flowers and hot-house and green-house plants. There were many other florists and amateurs to whom prizes were distributed, but the above were the principal winners; and, indeed, so nearly equal were the merits of many of the competitors, that the judges had considerable difficulty in making their award. The animals in the gardens were in the highest condition; and were, of course, second only to the flowers in attracting the curiosity of the company. The rhinoceros was surrounded with a crowd of visiters of all ages; and the monkeys, parrots, elephants, &c., also came in for their share of attention. The very greatest praise is due to Mr. Cross, the principal proprietor of this establishment, who not only gave the use of his grounds, for two days, gratis, but, as we were informed, was also at the sole expense of the numerous tents and the band of music; and, besides, subscribed 50*l.* to the Society.—*Gard. Mag.*

The London Horticultural Society held its third show for the year 1834, on the 13th of September last. The display of georginas was most splendid; but it was greatly injured in effect by the want of classification of the kinds. Only two attempts were made at classification; and though confessedly done in great haste, yet the result to us was very satisfactory. One of these attempts was made by Mr. Veitch of Exeter, but the name of the party who made the other we could not learn. Had reading gardeners been the principal exhibitors of these georginas, we are persuaded that what we have before said on the subject of classification would not have been lost on them; but practical men, we shall be told, are not to be taught their business by books, or bookmakers. So much the worse for them. Among the plants exhibited, was a very fine specimen of Anigozánthos rùfa, from the Swan River, from seed sent to Robert Mangles, Esq., by Sir James Stirling, sown in August, 1833. It is a half-hardy hæmodoraceous plant, with leaves like an iris, about 2 ft. high; a free grower and flowerer, and likely to ripen abundance of seeds. Its tubular corollas are of a deep crimson color, running at the base into a deep velvet-like bluish green, which gives the whole a parrot-like aspect, and harmonises well with the trees and paroquets of Australia. A beautiful silver-leaved Quércus *I*lex was exhibited by Mr. Veitch. A dried specimen of a new hardy climber, Physiánthus undulàtus, which flowers from August to winter, was shown us, and, when plants can be obtained in the nurseries, it will probably be found as great an acquisition as Lophospérmum or Calámpelis. Among the fine specimens of old plants were Oncídum papilio, (of which we recently received a drawing and dried specimen from Dr. Hamilton at Plymouth) a very handsome Brugmán*sia* suavèolens, numerous fuschias, &c. Among the fruits were very fine melons, pine-apples and grapes. Among the articles shown incidentally, was an improved orange tub of slate, which we shall hereafter figure and describe. The following prizes were awarded:—

The gold Banksian medal: 1. To Mr. C. Dowding, gardener to Lady Clarke, for miscellaneous fruit; 2. To Mr. Redding, gardener to Mrs. Marryat, F. H. S., for miscellaneous plants; 3. To Mr. C. Brown, F. H. S., for a collection of 100 georginas; 4. To Mr. Glenny, F. H. S., for a collection of 100 georginas.

The large silver medal: 1. To Mr. Atlee, gardener to T. Farmer, Esq., F. H. S., for grapes; 2. To Mr. R. Buck, of Blackheath, F. H. S., for Muscat grapes; 3. To Mr. Fletcher, gardener to George Smith, Esq., for a queen pine; 4. To Mr. Wm. Bridden, gardener to Mrs. Myddleton Biddulph, for a New Providence pine; 5. To Mr. J. Loudon, gardener to Samuel Gurney, Esq., F. H. S., for green-fleshed melons; 6. To Mr. Wm. Lindsay, gardener to the Duke of Devonshire, F. H. S., for Gansel's bergamot pears; 7. To Mr. Jarvis, of Turnham Green, for beurrée Diel pears; 8. To Mr. Joseph Kirke, F. H. S., for a collection of apples; 9. To Mr. Upright, of Morden, for miscellaneous plants; 10. To Mr. George Mills, F. H. S., for miscellaneous plants; 11. To Messrs. Rollison, of Tooting, for Epidéndron cuspidàtum; 12. To Mr. Stephen Hooker, F. H. S., for China and perpetual roses; 13. To Messrs. Rollison, for miscellaneous roses; 14. To Mr. Widnall, of Cambridge, for a collection of 100 georginas; 15. To Mr. Gaines, of Surrey Lane, Battersea, for a collection of 100 georginas; 16. To Mr. C. Brown. of Slough, F. H. S., for a collection of 25 georginas; 17. To Mr. Widnall, of Cambridge, for a collection of 25 georginas.

The silver Banksian medal: 1. To Mr. Clews, F. H. S., for black Hamburgh grapes; 2. To Mr. Spong, gardener to Robert Gordon, Esq., M. P. F. H. S., for melons; 3. To Mr. Jarvis, of Turnham Green, for apples; 4. To Mr. Boone, gardener to S. Warner, Esq., F. H. S., for citrons; 5. To Mr. Cuthill, gardener to Lawrence Sullivan, Esq. F. H. S., for cucumbers; 6. To George Robins, Esq., F. H. S., for *Yúcca aloïfòlia*; 7. To Mr. Spence, gardener to R. Durant, Esq., F. H. S., for Brugmán*sia* arbòrea; 8. To Mr.

Mountjoy of Ealing, for heartsease; 9. To Mr. C. Brown, of Slough, F. H. S. for miscellaneous heartsease; 10. To Mr. Rivers, of Sawbridgeworth, for China asters; 11. To Mr. Brewer, of Cambridge, for seedling georginas; 12. To Mr. Henderson, gardener to Captain Foster, F. H. S., for seedling georginas; 13. To Mr. Wilner, of Sunbury, for 25 varieties of georgina; 14. To Mr. Molier, of Fifield, Berks, for 25 varieties of georgina; 15. To Mr. Catleugh, of Hans street, Sloane street, for a collection of 100 georgina pots.—*Gard. M.*

INDIA.

A Plant-house for excluding Heat, and growing British Plants. Mr. G. Porter, lately returned from Penang, informs us that the Marchioness of Hastings, when resident in Calcutta, as the wife of the governor, had an immense conservatory built, for the purpose of growing British plants and trees; the intention being to shut out the heat. Mr. Porter mentioned to the marchioness, that instead of shutting out the heat, it would rather increase it; and, in consequence of experiencing this to be the case, the house, after costing an enormous sum, was applied to contain a few common articles that heat could not injure. After similar instances of extravagance and folly, it is not greatly to be wondered at that the East India Company have, in a great measure, ceased to patronise botanic gardens.—*Gard. Mag.*

Art. III. *Domestic Notices.*

The Massachusetts Horticultural Society and Mount Auburn Cemetery, which was incorporated by Acts additional to an Act of the Massachusetts Legislature in 1831, has lately agreed by an unanimous vote, to dissolve the connexion. The proprietors of lots in the Cemetery, in behalf of the Society, are to apply to the Legislature for a new Act, "establishing them and their associates or assigns a corporation with all proper powers and authorities, to be called the Mount Auburn Cemetery, or by any other appropriate name or expressive designation." A petition will be presented to the present Legislature, by a joint committee of the proprietors of lots in the Cemetery and the Massachusetts Horticultural Society, appointed for the purpose.—*Conds.*

The Country Seat of the late Gov. Gore, at Waltham, has recently been purchased by the Hon. Theodore Lyman, Jr., of this city. We believe that Mr. Lyman contemplates many and important improvements in the grounds and garden, which latterly have not received much attention. We anticipate that Mr. Lyman's alterations will make his seat at Waltham one of the most beautiful and picturesque in the vicinity.—*Ib.*

The Green-house of Thomas Brewer, Esq., Roxbury, was consumed by fire during one of the severe cold nights the first part of last month. We understood Mr. Brewer to say he lost quite a valuable collection of plants; those that were saved from the flames, were only saved to be destroyed by the frost, before they could be placed in a warm and proper situation. Mr. Brewer had a considerable number of Caméllias, which he prized very highly.—*Ib.*

The Plants of the late Dr. Dixwell, consisting principally of Caméllias, were lately disposed of at auction. The Caméllias were mostly common kinds, but were grown from cuttings without being inarched, by which means the plants were much more beautiful in form. Dr. Dixwell was very successful in this method of cultivation, so rarely if ever pursued by practical gardeners.—*Ib.*

Art. IV. *Calls at Gardens and Nurseries.*

Agreeably to the remarks made in our introduction, we now present our readers with a few notes, very hastily taken, upon a few of the gardens and residences we have visited during the last month. From pressure of other engagements, we have not done this so fully as we should have wished, either to do justice to some of the beautiful places we have visited—to the many new, rare and elegant plants we have unexpectedly observed in bloom—or to gratify ourselves in our own descriptions. We hope however, our next visits will be made with less haste, that we may give a more detailed account of some of the improvements which have been, and are now making, at many places. The greenhouse generally presents less attraction in the month of January, than in any other of the winter months, unless we except December; and we are not certain that the latter will yield to the former, unless in such seasons when the early frosts destroy the various plants, which the zealous gardener would transfer to the greenhouse, to adorn it, while the pleasure ground presents a waste and dreary aspect. In the middle of December last, we visited some of the same places we have the last, month, one or two of which we believe we mentioned. We found but few additional plants in bloom; but in February, we may anticipate a rich and varied treat. The very severe cold the first part of last month, we are happy to learn, has not caused any injury to the various greenhouses. But it was found necessary to keep up a very strong heat during some of the coldest nights.—One thing the severity of the weather has certainly proved, that the largest and loftiest greenhouses or conservatories in our vicinity, may be kept at a proper temperature—and that too, with less trouble to the gardener, and less expense to the owner, heated upon the hot water system, than by the old method of brick flues. We were astonished to find there was so much difference in the quality of the heat; the air in the houses heat by hot water being mild, bland, and humid, while those heated by brick flues were dry and uncongenial. We shall mention in the course of our remarks, the different places which are heat by hot water, and the temperature at which the houses were kept during the late severe weather.—

Belmont Place, Watertown, J. P. Cushing, Esq.—January 13th. This beautiful residence was formerly known and termed the "Preble Place," but since it has passed into the hands of the present liberal owner, it has been known by the name at the head of this paragraph. It is an excellent situation; the whole grounds contain about one hundred acres, consisting of a lawn, garden, and pleasure grounds. The garden, of late years, had suffered from neglect; and many of the fruit trees, shrubs, &c. which were planted at great expense by Mr. Preble, had become old and decayed. They were all rooted out by the direction of Mr. Cushing, and the situation of the garden altered from its former position. It has now become one of the finest in the country, and will probably before long, vie with the famous English gardens of Sion House and White Knights.

The first objects which struck us on entering the forcing grounds, was a new range of pits, we believe twelve in number,—six of which were built of brick, solid, coped with plank, and sank level with the surface of the ground; these we presume were for late forcing. We observed that they were already filled with dry leaves, and probably intended for lettuces, radishes, &c. The other six were built on the plan (or very similar) recommended by McPhail, in his Gardeners' Remembrancer, and may be found illustrated with a wood cut in Loudon's Encyclopædia of gardening, p. 302. § 1551.

They are built in the most substantial manner, and will probably last many years; we believe that none were ever erected on this plan in the country, and we are glad to know that their value will now be easily ascertained; for we are sure no person is more capable of making the most of them than Mr. Cushing's gardener, Mr. Haggerston; we found him making preparations for forcing vines, on the coiling system, as recommended by Mr. Mearns, an account of which will be found at page 60 of the present number. Mr. Haggerston has already coiled a large quantity which we observed in the back shed of the green-house, we should say fifty pots or more. Some of the pots are about ten inches in diameter and some fifteen. Mr. Mearns recommends shifting, but Mr. Haggerston agrees with us in thinking it impossible to do so, as a vine that is coiled round a pot six or eight times, must be done so with considerable pressure against the sides, and it certainly would uncoil when the pots were taken away, and the ball of earth left unprotected. Mr. Haggerston has however, very kindly promised to communicate to us any information in relation to his practice.

From the forcing ground we now entered the large conservatory, in the centre of the extensive range of houses, by passing through a grapery—the peach house, and then another grapery, of larger size than the first named. All three of the latter are yet unplanted, and of course present nothing worthy of note. They are now used to protect chrysanthemums, roses, pinks, &c. &c. The first object which rivetted our attention, as we opened the door, was a magnificent plant of the Double White Camēllia, upwards of eight feet in height. The flowers had not yet began to expand; A few only just showing their color. Passing round the back stage, which forms a semicircle against the wall on our right, we next observed a beautiful plant of the Acàcia lophánta, ten feet in height, in full bloom; its graceful and waving foliage, together with its clustered heads of straw-colored blossoms, forming a conspicuous object. In the centre of the stage stood a grand specimen of the Pandànus spiràlis (screw pine) the finest, we believe, in the country. Further on was another splendid plant of the double white camēllia, corresponding in its situation, with the one first named on the other end of the stage; this plant, Mr. Haggerston informed us, had open at one time a few days previous to our visit, *sixty* full blown flowers; we counted, ourselves, twenty-five, and we cannot in language do justice to the delicacy and loveliness of its snow-hued blossoms. The Red varieties may dazzle—the variegated excite astonishment—the Blush gratify our admiration—but the old double White alone will maintain its richness and attraction, when all the other varieties now existing shall become extinct. The two Camēllias, the Acàcia, and the Pandànus were the principal objects on the back stage; but we observed a Pæònia papaveràcea, showing two large and prominent buds which will probably be open in ten or twelve days; this will be a grand sight. The Schizánthus mentioned in our last were still blooming in great profusion. A warratah Camēllia was just opening a bud; and a few of the double Striped were just shedding their petals. A number of small plants of the Double White were blooming finely. We observed an Azàlea ledifòlia and A. índica phœnicea, just showing buds: A. índica variegàta had opened one or two flowers, but we do not think they are of very great beauty; they are not to be compared with the white. Mr. Cushing has some fine plants of Beaufòrtia decussàta and Epàcris paludòsa; he has also, a small, but very healthy plant of the splendid Ríbes speciòsum, which has been so eagerly sought after in the English nurseries. Those invaluable ornaments, the White and Purple Primulas, intermixed with the Sálvia fúlgens, splēndens and other plants gave the whole stage a gay and summerlike appearance. Continuing round the house, on our right we found the front shelf filled with Mignonette, Hyacinths, a number of beautiful Oxalis's, some very pretty plants of the Hoitza coccínea, Primulas, &c. The Mignonette and Hyacinths filled the house with their agreeable odors. On the two front stages which are separated by a walk, the plants are ranged up on either side, and exhibit the same appearance from the centre as from the front walk of the house. They were stocked with Salvias, Primulas, and a number of plants of the Alónsoa incisifòlia, their rich color and singular shaped flowers contrasting very finely with the pale lilac and various shades of color of the Schizánthus, no two of which seemed to be alike. Four or five pots of the Antholyza æthópica, will be in flower in a few weeks. We now passed on through another grapery,—which was filled with Hyacinths, Crocuses, Roses, Pinks, &c. to be taken into the house when wanted to bloom,—into the two stoves. Here we observed a magnificent plant of the genus Euphórbia, called in New York E. Poinsettii, in honor of Mr. Poinsett, late minister to Mexico, who, it was said, introduced it into the country. It is not, however, a new species, several gentlemen having informed us that they had seen it in flower in the London nurseries some years since. We looked over Loudon's *Hortus Britannicus*, and the Encyclopedia of plants, with Mr. Haggerston, but could not find any species registered, which answered the description of the plant; upon our return, however, we again looked into the subject, and find in the first supplement to the *Hortus Britannicus* a species called splèndens, figured in the Botanical Magazine, t. 2902, which we think answers nearly to the description. Whatever species it may be, it is certainly a splendid plant; the beauty does not consist in the flower, but in the large bractes that surround it, which are of a deep crimson scarlet, and measure fifteen inches in diameter. We saw a plant in New York last spring, but the bractes were not more than half as large. On the back wall, close by the door, was a fine Passiflòra quadrangulàris, full of buds and with one or two of its curious and superbly elegant blossoms, expanded. Ruéllia speciòsa had been in flower; a species of Justicia was beautiful; Ardisia (crenulàta we believe) was beautiful with its umbels of glossy bright red berries; the Salvias had passed the zenith of their splendor. That little floral gem the Verbèna chamædrifòlia was blooming in all the vividness of its summer beauty. Thunbérgia fràgrans, a delicate plant, had been prettily in bloom. There were many other plants, but haste prevented our noticing them particularly. Returning through the conservatory the thermometer caught our eye, which reminded us to inquire of Mr. Haggerston, the temperature of the house during the severe cold nights the first of the month; he informed us that when the house was shut up at night the temperature was 48 deg.—and at seven the next morning 50 deg. The hot water pipes are led under the walk the heat ascending through the open iron grates, between the marble. Mr. Haggerston preserves the utmost order and neatness in the stoves and conservatory.

Oakley Place, Wm. Pratt, Esq.—January 13*th.* The two entrance gates to Mr. Pratt's grounds are nearly opposite to those of Mr. Cushing's. The situation of the house is a little higher;—and the views from it embrace rather more extent of distance than from Mr. Cushing's. They are both however, eminent in this respect. Mr. Pratt resides in the city during the winter, and the house remains shut up till spring. Mr. McLellan, the gardener, is a very industrious and obliging man, and kindly offered to communicate to us some of his experience in the cultivation of plants. It being very late in the afternoon when we visited him, we were not enabled to see the beauty of many plants that were in full bloom, especially several large Ericas, and a specimen of the Polygala grandiflòra, which Mr. McLellan informed us, was splendidly in flower; he however gave us a small branch, with three or four expanded flowers, which we took home with us. The plant was imported four or five years since by Mr. Pratt, but has not flowered till this year; the P. speciòsa, about the same size, will be out in a few days. Collòmia grandiflòra, a pretty annual, introduced last year, Mr. McLellan has finely in flower; he took it up out of the border, upon the approach of frost, and set it in a pot in the green-house. We observed two very large plants of Azàlea ledifòlia, and A. índica phœnicea, which will be in bloom in three or four weeks. We recollect of seeing the A. ledifòlia at the Massachusetts Horticultural Society's rooms last spring in full bloom; it was completely covered with its snow-white blossoms; it has now *sixty buds.* Three or four plants of the Corræa virens were displaying their beauteous bell-shaped pendulous flowers. Rhododéndron arbòreum hybridum, with six or eight flower buds, will make a fine show during the spring. Mr. Pratt has made some accessions to his collection, among which are a number of choice varieties of the Camèllia japónica, which look in good health.

Mr. Pratt's greenhouse is entirely new, having been erected the last summer; it is heat with two brick flues, one only of which is used unless in very severe weather. The stage consists of one range running the whole length, with two tiers of shelves; one running up very steep from the walk, which runs parallel with the back wall, and the other from the front walk, about the same slope as the surface of the glass. Mr. McLellan keeps his Camèllias, Rhododéndrons, and other plants which do not need much snn, on the back stage; the Camèllias remain much longer in bloom than when placed in front; the Cáctuses Stapélias, &c. on shelves at the end of the house. Every thing denoted cleanliness and attention.

Roxbury, J. Lemist, Esq.—Jan. 15*th.* It is about two years since we visited the garden of Mr. Lemist; it was then under the management of our valuable correspondent, J. W. Russell, now at Mount Auburn. When Mr. Russell left he was succeeded by Mr. Murphy, who had the care for some time. It is now kept in its former beauty under the direction of Mr. T. Willott. Considering the disadvantages which Mr. Willott labors under, (a leaky and damp house) the plants look in excellent condition, and we think Mr. Lemist must feel highly gratified in being so fortunate as to procure his assistance. Considerable alterations and improvements have been made in the disposition of the plants since we were here before; they were then set out in the soil in the back border; but they grew too luxuriant in this situation, and the Camèllias and Rhododéndrons did not form any flower buds. Last season, by the direction of Mr. Lemist, the plants were taken up and a stage erected, upon which they are now placed. In the centre of the house, between the walk and the front wall, is one of the finest specimens of an orange tree we have ever seen; we counted on it upwards of *eighty* ripe fruit, some of which measured five inches in diameter. Opposite to this, on the back stage, is a plant of the Double White Camèllia, with twenty expanded flowers, nearly as beautiful as the one we saw at Mr. Cushing's the 13th;—on one plant of the Double Striped we counted sixteen full blown; it is singular what a difference there is in some plants of this variety; sometimes they open almost red (which was the case with the one above), and again they are as perfectly striped every petal, as a carnation; we have some in bloom in our own garden, which almost resemble the York and Lancashire Rose; a Single White and Lady Hume's Blush had one or two flowers just expanded on each; how beautiful is the latter! Among numerous large plants is the Ficus elásticus ten feet high; a Rhododéndron arbòreum hybridum with nearly twenty-five promising buds; Strelitzia reginæ, and Cycas revolùta; a fine plant of Acàcia armàta, with hundreds of buds, will be soon in flower; some Ericas of the common kinds are displaying their delicate little pendulous blossoms, and a large quantity of plants of the Dàphne odòra are filling the house with their fragrance.

We now, quitting the greenhouse, passed round to a small house used for forcing. In this is a pit, nearly eighty feet in length, filled with lettuces and radishes, which will be ready for pulling in a few days; we never observed any look more green and healthy; some of the heads of lettuce being as large and solid as a cabbage. They were set out in the pit about the 15th of October; and Mr. Willott has not lost a plant from dampness, which is very remarkable at this season. The wood of the vines, which are planted on the front border, is very fine, and will produce a good crop. We understood Mr.

Willott that they did not gather a bunch from the whole house last year—but he hopes this season to make up the loss; he has had good success in growing grapes, having raised some that weighed 2¾ lbs. the bunch, at Mr. Breed's, two or three years since. There is a stage at the back of the pit, which is filled with geraniums, grown exceedingly well. Mr. Willott found some plants in a very unhealthy state, and in need of immediate renovation, when he took charge of the place.

Hawthorn Grove, Dorchester, M. P. Wilder, Esq.—Jan. 15th. This place, the residence of Mr. Wilder throughout the year, consists of about fifteen acres; most of which, with the exception of a large orchard and the garden, is now occupied by him as grass land. The house is very pleasantly situated, and partly surrounded with evergreens. We hope however Mr. Wilder will make some improvements, by cutting away a few of the tallest, as they obscure the house from view, especially in the summer, when the other deciduous trees intermixed with the spruces, &c. are in full foliage. Mr. Wilder contemplates making alterations and additions, one of which will be, to build a new greenhouse or conservatory. The present greenhouse is very old, and the situation rather damp, which greatly injures the plants; and a collection as choice as he has gathered together, deserves a more healthy atmosphere than they at present enjoy. Nor can their beauty be truly rated when placed in such a house; for in those where lightness and elegance of structure are predominant, it contributes much to set off the splendor of its inhabitants.

Mr. Wilder may in truth be considered an amateur; his plants are under his own management and care, and they will certainly not suffer by comparison with those under the eye of experienced gardeners. We have spoken before of the vigor and health of some of his plants, and it is unnecessary to say they all partake of this character. Among the Camèllias that will be in flower in the course of a few days are the following,—Camèll*ia* japónica, Róssii, C. Elphinstònia, C. Welbánkii, C. maliflòra, C. Dorséttii, C. speciòsa, C. grandíssima, C. insígnis, and C. prægnans, the five latter of which (we believe) have never flowered in the country. Mr. Wilder shew us a colored plate of Dorséttii, and we should think if the flower will at all resemble the plate, it must indeed be splendid; elphinstònia we saw last year, it is a little like the double striped, but less beautiful: speciòsa has a superb leaf; we think we never saw a more bold and promising bud than that upon the variety called grandíssima; it is indeed grand. Mr. Wilder has a seedling coming into bloom which bids fair to be a great beauty; pensillàta, pæoniflòra, double white, single white, and fimbriàta are elegantly in bloom; the fimbriàta with its fine fringed snowy petals is just in its prime; we never saw a finer or better shaped flower; for although an old variety, from some cause or other, it is but seldom seen in our greenhouses. The large plant of double white has a few expanded flowers.

Mr. Wilder has a large plant of the Acàcia longifòlia six or eight feet high, which will be one mass of bloom in February or March; A. lophàta is now in flower; Jambòsa vulgàris is showing its fruit, and if placed in a hot-house would probably ripen; it is a native of the East Indies and is there called the *Rose-Apple;* it is an eminently beautiful shrub; its clusters of delicate white tassel-shaped flowers, contrasted with the dark green foliage, and cinnamon colored shoots, has a lovely appearance; its fruit is said to be so powerfully perfumed with rose water, that but one or two can be eaten. There is here also two plants of the Strelitzea rapidly pushing into bloom. Those pretty little plants the double white, purple and pink Primroses are beginning to throw out their buds. But among the whole of the plants nothing so much gratified us as one or two varieties of the all-beautiful and fragrant tea rose—one in particular called the Anemòne was delightful; the color is of the richest pink, the flower very double and somewhat resembling in form when fully open, some kinds of the province rose (only more anemone shaped). The petals have the appearance of the finest crape, and are so thin and delicate that they seem almost æthereal, the least breath setting all the petals in motion. The plant is of vigorous grrowth, a character not applicable to the Teas in general. It was introduced by Mr. Wilder, and is now flowering for the first time. He has a yellow which is also of very strong growth, a fault with the common yellow Tea which makes it at present so scarce. A plant or two of the Iris chinénsis will be open in a few days. Dàphne delphìna (supposed to be collìna) is flowering beautifully for the first time; it is of a rich lively purple color, and a very desirable plant. Some new Azàleas are budded, but we leave them till our next visit.

Brookline, T. H. Perkins, Esq.—January 20th. This is an elegant residence; the large specimens of Pinus Stròbus, Abies canadénsis, balsamífera, and álba, with others of their species, give the grounds a gay and lively appearance even at this dreary season of the year. There are several large clumps of the above which serve to break the view of the garden from the mansion; and the ride to the pleasure grounds winds away from the left of the garden through a grove, so dense that you but now and then catch a glimpse of its zig-zag direction. The garden has two extensive ranges of houses, each three hundred feet in length; one range is divided into four compartments for forcing grapes and peaches; the other, which has been built within a few years, is divided into five compartments of sixty feet each, —the centre one of which is the greenhouse, and is considerably more elevated than the others. Two on the east side are for Peaches, and two on the west for grapes. We entered the greenhouse from the garden by passing through the back shed; the other entrance being closed up till open weather in the spring, except on some particular occasions when company is expected. The entrance into the greenhouse then is by the avenue leading from the house under a grove of Pines, Cedars and Hemlocks, into and through the two peacheries. The peach houses are not built for the purposes of early forcing; those in the old range being brought forward first, and these only accelerated by the natural heat of the sun, without fire. Mr. Cowan, the gardener, was very attentive and obliging, and showed us round, giving us all the information we wished in relation to the heating of the houses, &c. and pointing out to us all the new and rare plants contained in Col. Perkins' very large and choice collection.

In the greenhouse we found Mr. Cowan rearranging and cleaning up the plants, as they often need it during the winter: this did not however prevent our obtaining the names of the various species. The first object which struck us, as in Mr. Cushing's, Mr. Lemist's, and Mr. Wilder's greenhouse, was a magnificent plant of the Double White Caméllia—with above twenty fully expanded flowers; we did not know till we had made these visits, that there were so many large specimens of this beautiful plant in our vicinity; but we even find them as plenty as the common China rose. This plant was in the centre of the house, and was surrounded with a large number of new and valuable varieties, which for vigorous growth and healthy appearance we have not seen surpassed. Among those new which now show the color of their buds and will open in a few days, are Caméllia japónica, imbricàta, eclipsis, ròsa sinénsis and glorièsa; a new variety from China without name, has a fine bud and will undoubtedly be a fine flower; the foliage is very dark green and has somewhat the appearance of the Double Striped; the imbricàta will be superb; ròsa sinénsis will be a beautiful rosy red. Those new and nearly expanded are Egertònia, and Anemoneflòra striàta variábilis; the former is of a very dark velvet red, resembles the warratah in shape, and has a few faint touches of white; the latter is a charming variety which we believe is in no other collection; the color is a fine rich pink; Ròssii, Préssii and many others have fine buds; Mr. Cowan has upwards of two hundred seedlings two or three years old. There is here a plant of the Enikánthus quinqueflòra belonging to the natural order Ericeæ; it was imported by Col. Perkins three years since from the celebrated establishment of the Messrs. Loddiges, and is the only specimen in the country; it cost *six guineas.* It is just showing its pink buds which hang in pendulous umbels, and will be open in few days. A large specimen of Strelitzea augústa, also very rare, is growing finely. Eriostémon cuspidàtus is throwing out its spikes of buds. There are fine plants of Edwárdsia grandiflòra, Teleòpea speosissima, Beaumóntia deccussáta, &c. Large plants of Azàlea ledifòlia and indica phænicea are covered with flower buds; Valtheimia viridiflòra is coming in flower; three or four varieties of the Acàcia are full of buds; the finest specimen of Dáphne hybrida we have seen is in Col. Perkins' collection. The odor of the flowers, with which every branch was covered, is very similar to the Lilac; it is a plant which should be seen in every greenhouse.

We entered the Peachery, and we should do injustice to Mr. Cowan, did we not mention his method of training and pruning the Peach.—

The trees are trained on the back wall, on a wire trellis under the glass, and on a trellis raised half way between the ground and glass. Those under the glass were trained as if the shoots of the peach were as pliable as the vine. One stem was brought up perpendicularly to the top of the front wall; it here divided off into two shoots and each ran along horizontally, being made stationary by fastening with shreds; from these horizontal shoots two or three branches were carried up the trellis under each rafter of the house, leaving a distance of about two feet between the branches under the centre of each light, that the sun may have considerable influence on those trained below. The young shoots were full of blossom buds, and we did not observe scarcely a speck of gum or canker on either tree. We intend at some future time to give a plate, descriptive of his method of training.

From the Peach house we passed into the grapery, on the other side of the greenhouse. This compartment is heat with a hot water apparatus invented by Mr. Perkins of London, and is the only one of the kind we believe which has been in operation in the country. Accidents have however happened to it several times, and once the expansion tube has burst; it probably may be owing to not understanding their management; the pipes are iron and only an inch bore, and run round the house several times. During the severe cold nights of the first of the month when the thermometer was 18 deg. below zero, the house was kept up to *seventy-five* deg. during night, and all through the cold weather it ranged from 65 to 80 degrees. Mr. Cowan had tied his vines up to the trellis, and the eyes had begun to swell, when an unlucky accident happened—one of the pipes burst; Mr. Cowan had to take the vines down immediately and tie them up in straw and mats, where they now remain,—the pipes not yet having been repaired. There is no doubt but it is the best method of heating forcing houses yet discovered; but they require much attention and the gardener some knowledge of the theory of heat, to manage them free from accidents..

From the grapery we visited the forcing ground, where many improvements and additions have been made since last season. Four new pits have been erected on a plan similar to those mentioned at Mr. Cushing's; but instead of a double wall they have only a single one; the pits are not in a range, but are front of one another, at the distance of six feet between each; this is to leave room to throw in dung all around, the heat to enter the bed through pigeon holes in the wall. They are fourteen feet in length, and are for cucumbers and melons, and for grapes on the coiling system. Mr. Cowan has cucumbers in the seed leaf, which look very healthy. In a small house in the garden heat by a brick flue, some vines have now broke; and will show fruit in a few weeks; the roots are outside in the border, which is covered eighteen inches with manure. Mr. Cowan will begin to force in the old range of houses in a week or two. The greenhouse is heat with hot water on the same principle as Mr. Cushing's, and no difficulty occurred in keeping it up to 45 deg. the coldest nights.

Somerset Place, R. Rogerson, Esq.—Jan. 17th. Mr. Rogerson has a greenhouse very conveniently attached to his dwelling. It is heat by hot water, and he finds no difficulty in keeping up a proper temperature with very little fuel. Mr. Rogerson has erected a pit in the back part of the house, against the wall, in which is plunged vines in pots, upon the coiling system. They have already burst some of their buds; the part of the shoots above the soil are wrapt up in moss, and syringed every few days to keep them moist; the pit is about 2½ feet in width, 18 inches deep, and runs the whole length of the house; it is filled with common tanner's bark, in which the pots are plunged; through the tan near the bottom of the pit one of the pipes is conducted from the boiler at one end of the house to the reservoir at the other. The pipes are of copper, about three and a half inches in diameter; along the front of the house is another pit, made in a similar manner to the former, though much smaller; another of the pipes runs through this to another reservoir at the same end of the house at which the boiler is placed; in this pit Mr. Rogerson raises fine lettuces, radishes, &c. &c. The heat imparted to the two pits from the hot water circulating through the pipes was about 70 deg. and very even; Mr. Rogerson raised some of the pots that were plunged, and placing our hand upon the bottom of them, we found the heat very moist and genial. We are confident that this method of heating greenhouses, graperies, &c. will be generally adopted in a few years. Mr. Rogerson has some fine large peach trees in pots, which he intends to take into the greenhouse in a few days to force them; they are full of very prominent blossom buds, which would soon expand if placed in a proper temperature; he has also some very fine Cherry and Fig trees in pots, which promise finely; on the stage between the two pits mentioned above, Mr. Rogerson has several plants, among which is a fine Orange full of ripe fruit; several Gladìoli in a forward state, almost ready for flowering, look strong and healthy. Some variegated Camèllias were just shedding the petals of some faded flowers.

At some future time we hope to have the opportunity to speak further of the hot water system as adopted by Mr. Rogerson, which is somewhat different from others we have seen.

In our garden at Cambridgeport, we have now coming in bloom Iris chinénsis; it has thrown up a spike fourteen or fifteen inches high, and shows seven or eight buds; Camèllia japónica speciòsa (Rawe's Striped Warratah) is now open, the first time of its flowering about Boston, and we believe in the country; it is a superb flower; the color is of a dark crimson-velvet red, with occasional dashes of white on many of the inner petals. We have hùmilis, anemoneflòra álba, crassinérvis, and some other choice varieties with fine buds. Prímula prænitens, álba, and purpùrea, have several weeks displayed, and continue to display their umbellated heads of snowy and purple blossoms. Collòmia grandiflòra which we took up from the flower-border last autumn is now showing some of its delicate buff-colored flowers. We observed this in flower at Mr. Pratt's; it is an annual, but the seed should be sown very early to have the plants bloom before frost.

Many of our annual plants if sown late in autumn and transplanted into small pots, would be highly ornamental in the green-house. Among others that we have tried, are Agératum mexicàna, and Gilia capitàta; the latter throwing out its heads of sky-blue flowers throughout the whole winter season; the plants are very hardy, and require but little care to preserve them. Stèvia serràta and purpùrea are also very beautiful; we saw a plant of the purpùrea at Mr. Lowell's a few weeks since which had open a fine cyme of flowers; it is a valuable hardy perennial.

Thoughts on Flowers.—"Are not," asks the author of *Atherton*, "flowers the stars of earth, and are not stars the flowers of heaven? Flowers are the teachers of gentle thoughts, promoters of kindly emotion. One cannot look closely at the structure of a flower without loving it. They are emblems and manifestations of God's love to the creation, and they are the means and ministrations of man's love to his fellow-creatures; for they first awaken in the mind a sense of the beautiful and the good. Light is beautiful and good; but on its undivided beauty, and on the glorious intensity of its full strength, man cannot gaze; he can comprehend it best when prismatically separated, and dispersed in the many-colored beauty of flowers; and thus he reads the elements of beauty, the alphabet of visible gracefulness. The very inutility of flowers is their excellence and great beauty; for, by having a delightfulness in their very form and color, they lead us to thoughts of generosity and moral beauty detached from, and superior to, all selfishness; so that they are pretty lessons in Nature's book of instruction, teaching man that he liveth not by bread or for bread alone, but that he hath another than an animal life."—(A Chapter on Flowers, in the *Amulet* for 1832.)

ART. V. *Queries, Criticisms, &c.*

I am happy to see that you intend to devote a column or two in your Magazine to small items, queries, criticisms, &c. This, in my opinion, gives additional interest to a work of this kind, and much enhances its value.

Yours, truly, B. HALE IVES.

Salem, Jan. 17th, 1835.

GENTLEMEN,

I am glad to see that you have started your Magazine with the aid of such able contributors. The articles are all excellent, and augur well for the continuance of a work so much needed by all lovers of horticulture and floriculture. We hope in your next, or in some future numbers, you will give descriptions for erecting small pits for forcing cucumbers, &c., and for building green-houses and other useful and ornamental garden structures, accompanied with wood cuts, if it can be done without incurring too much expense. Such engravings would be far more valuable to the generality of your readers than cuts of flowers, which cannot be tolerably well done without being at great expense; and then they are not desirable in a work unless exclusively devoted to Botany and flowers. If they are not colored, which it is not supposed they can be at the low price of your Magazine, they are still more objectionable; as the form of a flower is no better than a description. Many gentlemen who are fond of plants would erect green-houses if they could but see plans to guide them in so doing, without leaving the business entirely to the builder.

The accentuations of all botanical terms will add exceedingly to its value, as it will serve as a book of reference to those who are in the habit of calling names incorrectly. I believe your Magazine, the first of the kind exclusively devoted to horticulture in our country, is also the first to attempt the accentuation of names. At a future time, I have other suggestions to make, and you will please excuse my freedom.

Yours, L.

Cambridge, Jan. 24th, 1835.

Art. VI. *Quincy Market.*

Roots, Tubers, &c.	From $ cts.	To $ cts.
Potatoes:		
Common, per barrel,	1 00	1 25
Common, per bushel,	33	40
Chenangoes, per barrel,	1 25	1 50
Chenangoes, per bushel,	37	50
Eastport, per barrel,	2 00	2 25
Eastport, per bushel,	60	80
Nova Scotia, per barrel,	1 25	1 50
Nova Scotia, per bushel,	40	50
Turnips:		
Common, per barrel,	75	1 00
Common, per bushel (washed)	40	50
French, per bushel,	50	
Onions, per barrel,	1 37	1 50
Onions, per bushel,	70	80
Onions, per bunch,	4	5
Beets, per bushel,	70	80
Parsnips, per bushel,	70	80
Carrots, per bushel,	40	50
Salsify, per dozen,	25	37
Radishes, per bunch,	25	
Horseradish, per pound,	10	12
Garlic, per pound,	15	20
Cabbages, Salads, &c.		
Cabbages, per dozen heads:		
Red,	75	80
Savoy,	40	50
Drumhead,	62	75
Brocoli, per head:		
White,	25	
Purple,	20	25
Cauliflower, per head,	37	50
Celery, per root,	6	10
Lettuce, per head,	12	
Spinach, per peck,	33	37

Squashes and Pumpkins.	From $ cts.	To $ cts.
Canada, per cwt.	2 50	3 00
Common crook-neck,	2 00	2 50
Lima,	2 00	2 50
Pumpkins, each,	25	30
Pot and Sweet Herbs.		
Parsley,		
Sage,		
Marjoram,		
Savory,		
Spearmint,		
Fruits.		
Apples:		
Baldwins, per barrel,	3 00	3 50
Baldwins, per bushel,	1 50	
Pearmains, per barrel,	3 00	
Pearmains, per bushel,	1 50	
Russetts, per barrel,	2 75	3 00
Russetts, per bushel,	1 50	
N. Y. Pippins, per barrel,	3 00	3 50
Pears:		
Iron white, for baking,		
per barrel,	4 00	
per bushel,	1 75	2 00
Sweet baking, per bushel,	1 50	1 62
Old St. Germain, per dozen,	none.	
Quinces, per bushel,	"	
Cranberries, per barrel,	6 00	6 50
Cranberries, per bushel,	2 25	3 00
Grapes, foreign, per pound,	37	
Pine Apples, each,	20	37
Oranges, per hundred,	1 00	1 50
Lemons, per hundred,	1 00	
Chestnuts, per bushel,	3 00	3 25
Walnuts, per barrel,	4 50	4 62
Walnuts, per bushel,	1 62	1 75
Almonds, per pound,	13	15
Filberts, per pound,	6	8
Castana, per pound,	4	6

Remarks. Since our last, the severe cold weather has frozen large quantities of Potatoes; it has also prevented the arrival of supplies from the eastward; many that have been touched with the frost are thrown into the market, and sold low, but prime and choice varieties still remain at our quotations. Turnips, Onions, Beets, &c., are brought in in sufficient quantity to supply the demand, at the same rates as our last. Radishes, the first this season, were brought in this week; they were the Scarlet Short-top variety, handsome growth and good size. Cauliflowers are still very scarce, and command higher prices; a few have been sold as high as fifty cents. Some fine heads of Lettuce, of the Hardy Green Hammersmith variety, have come in this week; they were quickly taken. Squashes are very scarce, many having been frozen; and although the demand is not large, prices have increased considerably since our former report. Apples yet remain at high prices; Baldwins have advanced a shade. Pears of common baking kinds are yet tolerably plentiful, but of choice varieties for the table there are none in market. If the St. Germains, or any of the new pears could be procured, they would bring very great prices. No Quinces to be had. Great quantities of Cranberries have been frozen, and the price of those of good quality has advanced considerably. By the arrivals this week, large quantities of Malaga grapes have been received, which has caused a slight depression. Chestnuts and Walnuts are still in good demand. M. T.

Boston, Jan. 20th, 1835.

Art. VII. *Massachusetts Horticultural Society.*

December 20th.—Exhibited.—Bezi de Chaumontelle (*Chaumontel*) Newton Virgoulouse and Winter Orange (of Coxe) pears; the latter a green fruit of medium size and good flavor; the Newton Virgoulouse was considered by the Committee highly deserving of cultivation, it being an enormous bearer; it keeps well, is excellent for baking, but will be of no use as a dessert pear. These were from R. Manning, Esq. From Mr. C. Weston, Boston,—specimens of the Holmes apple, from Mansfield; round fruit, medium size, rich yellow color, red on the side next the sun, flavor good.

December 27th.—Exhibited.—Conway, Malcarle, (*Mela carla of the Pomona Italiana*) and Wine apples. The Malcarle is a beautiful apple; the flesh white, of a delicate perfume much resembling rose-water. Passe Colmar pears, from R. Manning, Esq. Russett apples, from Messrs. Hovey; the origin of this apple is unknown, it being received from the country; the flavor was very rich and highly perfumed.

January 5th.—Exhibited.—Hardenpont de printemps pears; they were received by Mr. S. Downer, accompanied by the following letter:—

New Bedford, Jan. 5th, 1835.

Samuel Downer, Esq. Sir,—By your request made last summer, I now send you a small sample of Hardenpont de Printemps pears, not now in eating; when they arrive at maturity, you will please to examine the qualities, and you will oblige your friend,

William Swift.

Not being at maturity, Mr. Downer retains the pears, and will present them again when fit for eating. Isabella grapes, from T. Hastings, East Cambridge; these were excellently preserved, not a berry being the least decayed on six or eight clusters which were presented. We intend to give an article on Mr. Hastings' method of preserving them.

January 17th.—Exhibited.—By R. Manning, Esq., White Calville, Belleflower, and Michael Henry Pippin apples; the latter variety was received from New Jersey, but its name was considered doubtful by the committee. Cork Russett apples, from Mr. Ruggles, of Fall River; a large oblong fruit, russetted all over, the flesh spongy, inclined to shrivel, not juicy or high flavored, but sweet, considered a valuable fruit for drying.

A bouquet of flowers from Messrs. Winship, Brighton, containing the following varieties:—Caméllia álba plèna, Erica mediterrània, Calendùla hybrida, Geraniums, Oxalis, Roses, Stocks, Myrtle, Diósma álba, Erica arbòrea, Sálvia fúlgens and spléndens, Agératum mexicàna, Schizánthus pinnàtus, Prímula prænitens, purpùrea and álba, Hoitzia coccínea, &c.

In our report in our last number, of the plants exhibited at Faneuil Hall in September last, we accidentally omitted to mention those presented by John Prince, Esq., of Jamaica Plain, Roxbury. The plants were some of the finest and most showy that ornamented the Hall, and we cheerfully correct the mistake.

From John Prince, Esq.—Large specimens of Lemon and Orange trees; a fine plant of Cycas revolùta (Sago Palm); a very large Agave americàna; two plants of Diósma álba; Hedychium Gardner*iànum*, very fragrant; Hoya carnòsa, Acùba japónica, &c.

MONTHLY CALENDAR

OF

HORTICULTURE AND FLORICULTURE,

FOR FEBRUARY.

FRUIT DEPARTMENT.

Grapes—in forcing houses will now, with light fires, begin to swell their buds. Where there are good strong vines in pots, they may be brought into the green-house to forward them. They should be set on the front flue, and the shoot trained up under the centre of the sashes. Cuttings and eyes should now be put in.

Strawberries.—Where pots of Strawberries were taken up in the fall, they may now be put in the green-house or hot-bed.

Lemons and *Oranges.*—Where these are wanted for stocks, to graft or inarch, the seed should now be sown in rich mould and placed in a hot-bed.

VEGETABLE DEPARTMENT.

Radishes should now be sown in hot-beds and frames, with a gentle bottom heat.

Cauliflower plants that have been protected in frames during winter, should have plenty of air and light. Seed may now be sown in hot-beds for a summer crop.

Cucumbers may now be planted with safety, as the days have become considerably longer, and consequently more sunshine. Prepare a hot-bed as directed in page 46 of the present number, in the communication of Mr. J. W. Russell, for propagating grape eyes. The seeds should be sown in pots four inches diameter, and when the plants are up, they should have plenty of air, to prevent their drawing; when they have thrown out two or three rough leaves, they should be hilled out; the soil best for them is loam and leaf mould, principally the latter, till the plants get strong.

FLOWER DEPARTMENT.

Tender annual flower seeds may now be sown in hot-beds. Use light rich soil, and cover the seeds very lightly. Those sown last month should now be potted off into small pots.

Georginas (Dahlias) may be plunged in the hot-bed to forward them, and afterwards potted in large pots and placed in the green-house.

Cuttings of Salvia spléndens, fúlgens and mexicàna should now be put in, six or eight cuttings in each pot, and plunged in a bottom heat, or in a very warm part of the green-house.

Hyacinths, *Narcissus* and other bulbs in glasses, must have the water shifted every week; soft rain water is the best; if the points of the roots have any dirt attached to them, take them out of the glass, and brush them very gently with a feather. The glasses should be thoroughly washed every two or three weeks.

Ranunculus roots may be safely planted about the 20th of this month. Select a spot of ground of the size wanted for the number of roots, and if the frost is not yet all out, procure an old hot-bed frame, and place it over the situation selected; bank up all round the frame with leaves, hay, or common garden soil, put on the sashes, and keep them shut every cold day, only opening them when the sun shines and the air is very mild. Cover up the frame every night with mats or hay. When the frost is all out and the soil tolerably dry, commence planting the roots, at the depth of one and a half inches from the crown, and four inches apart in the rows, and the rows five inches from each other.

Tuberoses and *Tiger-flowers*. Those who wish to flower these very early, should, about the middle of this month, plant them in small pots and place them in a hot-bed.

Camellias and other green-house plants will now begin to grow more rapidly; they will require more air and water as the days become warmer.

Calceolarias in small pots, should now be potted into a larger size filled with a compost of rotten leaves and light loam.

Cultivation of Penstemons. It was asserted in the *Botanical Register*, t. 1309, that seeds of the rare penstemons cannot be raised in heat. Part of the remark is in these words:—"It is indispensable that the seeds should be sown in a cold frame, or all endeavor to raise them will prove fruitless." Mr. Maund in figuring P. pulchéllus, remarks that to prove or disprove this assertion, he sowed seeds in a pot and placed them "in a rather warm hot-bed," where many seeds vegetated freely; and the plants so raised flowered well in the autumn. [Sowing them in a cold frame is, notwithstanding, doubtless preferable, as being more congenial to the natural mode. In natural dissemination, seeds are sown as soon as ripe; in gardening, they are often kept out of the soil until their vital energy is considerably weakened, and then artificial stimuli may be necessary to rouse it into action.]—*Gard. Mag.*

PLANTS IN BLOOM THIS MONTH.

Camèllia japónica, C. álba plèna, C. rùbra plèna, C. anemoneflòra, C. anemoneflòra álba, C. atrorùbens, C. rubricaúlis, C. fimbriàta, C. speciòsa, C. maliflòra, C. imbricàta, C. eclípsis, C. ròsa sinénsis, C. Egertònia, C. gloriòsa, C. Rawsiàna, C. variegàta, C. pensillàta, C. incarnàta, and other new kinds. Erica mediterrània and arbòrea, Diósma álba, Polygala speciòsa and grandiflòra, Dáphne hybrida and odòra, Enkiánthus quinqueflòra, Pæónia papaveràcea, Iris chinénsis, Acàcia lophánta, Strélitzia regina, Hoítzia coccínea, Corræa viridis, Cinerària cruénta, Magnòlia conspícua, Vibúrnum lauristìnus, and many others.

Errata in our last.

Page 9, line 34—for "indirect influences of southerly winds," read "*northerly winds.*"

Same page, 2d line from bottom—for "nearly" read "*equally.*"

THE
AMERICAN
GARDENER'S MAGAZINE.
MARCH, 1835.

ORIGINAL COMMUNICATIONS.

Art. I. *Notices of several of the most highly-esteemed Flemish and other European Pears which have produced Fruit in this Vicinity, together with the History and Description of those Varieties which have originated in this Country; accompanied with Observations on their Cultivation.* By S. Downer, Esq.

For the information of our horticultural friends, and for the purpose of aiding you in your endeavors to render your Magazine interesting to your numerous readers, I offer a few observations and facts, on the cultivation and developement of several of the new Flemish and other European pears, that have been received in this country within a few years, from different sources, and from various eminent fruit-growers and nurserymen, in England, and on the Continent.

Many of these varieties have been, with praiseworthy liberality, sent to the Hon. John Lowell, by the highly distinguished President of the London Horticultural Society, Thomas Andrew Knight, Esq.; and by Mr. Lowell they have been distributed through the country; several have been received from Dr. Van Mons of Brussells, one of the most successful cultivators of new pears on the Continent.

The London Horticultural Society have collected together all the new fruits, amounting to over twelve hundred varieties, for the purpose of correcting the synonymous names with which every catalogue abounds. Mr. Robert Thompson is at the head of the fruit department in their garden at Chiswick, and is the person who gave the descriptions of those fruits, figured in the London Pomological Magazine: from him R. Manning, Esq., of Salem, has lately received a great number of scions, of some of the most superior kinds in the above extensive collection, and we may anticipate that in a few years, our nurseries and gardens will be stocked with fruits far excelling our present varieties, of which we have but a limited number.

Urbaniste. *Hort. Soc. Trans.* Vol. v. p. 411, and of Mr. Knight's present. *Beurré de Roi of France.*

The former is the true Flemish name. This pear stands deservedly high, and is of great excellence in quality, besides other good points. It grows well, and retains its foliage till the very last of the season. Not even one of the smallest shoots have been winter killed on my trees. They are full and constant bearers, but they did not fruit early; it being six or seven years from the time of grafting; they have made good wood every season. This pear ranks with those of large size.

It ripens in October.

Raised by the Count de Coloma, of Malines, and specimens of the fruit presented to the London Horticultural Society from him, in 1823.

Beurre Knox. *Hort. Soc. Cat.* No. 104, and of Mr. Knight's present.

This pear may be placed with those large and fair; I have seldom seen spots on any of them; quality good, not first rate; many of them this year showed some signs of early decay at the core. The trees grow well, retain their foliage to the last of the season; none of the branches have been winter killed. My trees produced fruit the fourth year after grafting, and they are constant bearers. The color of the fruit is a pale green, russetty on the sunny side.

Ripens in October, and is one of the new Flemish pears.

Forelle. *Hort. Soc. Trans.* Vol. v. p. 408. *Pomological Magazine*, t. 112, and of Mr. Knight's present.

This pear, which appears so beautifully figured in the London Horticultural Transactions, and in the Pomological Magazine, does not succeed in our climate. The trees growing in my garden have been in bearing for the three last seasons, and not a single pear has matured sufficiently to perfect its color or flavor; they have shrivelled and then decayed. Part of the trees grow well, and the other part blight and decay, the fruit full of black spots, and showing strong marks of a run-out variety.

Supposed by Dr. Diel to have originated in Northern Saxony.

Passe Colmar. *Pom. Mag.* t. 64. *Hort. Soc. Trans.* Vol. v. p. 410, and of Mr. Knight's present.

This proves a very valuable variety, and worthy of general cultivation. The specimens exhibited at the Massachusetts Horticultural Society the two last seasons were exceedingly fine. It is said to be a great bearer. In perfection from December to February.

Raised by Counsellor Hardenpont of Flanders.

Hardenpont de Printemps of Mr. Knight's present.

Beurre Rance. *Hort. Trans.* Vol. v. p. 130. *Pom. Mag.* t. 88.

The trees in my garden have not shown even blossoms, although the scions were put in good stocks eight years since. For the few first years after grafting, the wood got winter killed more or less; but the last two, the branches have stood the cold exceedingly well. I saw last summer, at the garden of William Swift, Esq. New Bedford, a very healthy tree full of fine fruit, some of which he has sent to me, to be presented to the Massachusetts Horticultural Society when in a fit state for eating.

In eating from January till March or April.

Raised by the late Counsellor Hardenpont at Mons; the fruit first exhibited at the London Horticultural Society in 1820.

Beurre Diel. *Pom. Mag.* t. 19. and t. 131.

This most noble pear may be placed among the very best, if not at the head of our late varieties. My tree, with only five scions on it, produced twelve pears the fourth year after grafting (1833); eight of those averaged twelve and a half ounces each. After keeping them in the house a short time, they matured—without shrivelling in the least—and turned of a deep yellow or rather orange color. Flesh buttery, melting, full of juice, flavor aromatic and deliciously excellent, between the Brown Beurré and Crasanne, if I may be allowed the comparison; it has none of the acid of the former, and is free from the astringency of the latter. Last year the same tree produced eighteen pears; but the season being short and cold, with early frosts and high winds, they were all blown off before they arrived at maturity. They consequently shrivelled and decayed. The tree is now full of prominent blossom buds. It is a free-growing variety, and not a single shoot has been winter killed or blighted. My pears did not partake of the form of the first figure in the *Pomological Magazine*, (which was taken from a fruit ripened on a wall,) but all were like the second, from a standard tree. In proof of the unfavorableness of the last season towards ripening our fruits, I would mention, that several vines of the Isabella grape, which I have placed in different situations and aspects, did not, with but one exception, ripen or even color their fruit. This vine, growing under a south wall in a very sheltered place, ripened a few bunches. The others were unfit for the table.

It is in eating from November till January.

Raised by Dr. Van Mons of Louraine, and named in honor of Dr. Augustus Frederick Adrian Diel, one of the most distinguished German pomologists.

Capiaumont. *Hort. Trans.* Vol. v. p. 406. *Pom. Mag.* t. 59.

This beautiful and fine pear has been in bearing, in my garden, for the last three years. The tree is a free grower, comes into bearing very early from the time of grafting; the third year my scions bore a few fruit, and the fourth produced abundantly. The pears the first and second year were large and small on the same branch; but last season they were all of equal size, which is over medium. The tree stands our climate exceedingly well; not any of the branches have been winter killed or blighted. The color of the fruit is of a deep yellow or cinnamon color, and acquiring a bright red on the side in the sun. Flesh melting, rich, and high flavored.

Ripe the latter part of September, and will keep till the middle or end of October.

Supposed to have been raised in Flanders by M. Capiaumont of Mons.

Bartlett. Will probably prove to be WILLIAMS'S BONCHRETIEN figured in the *London Hort. Trans.* Vol. ii. p. 250. t. 16.

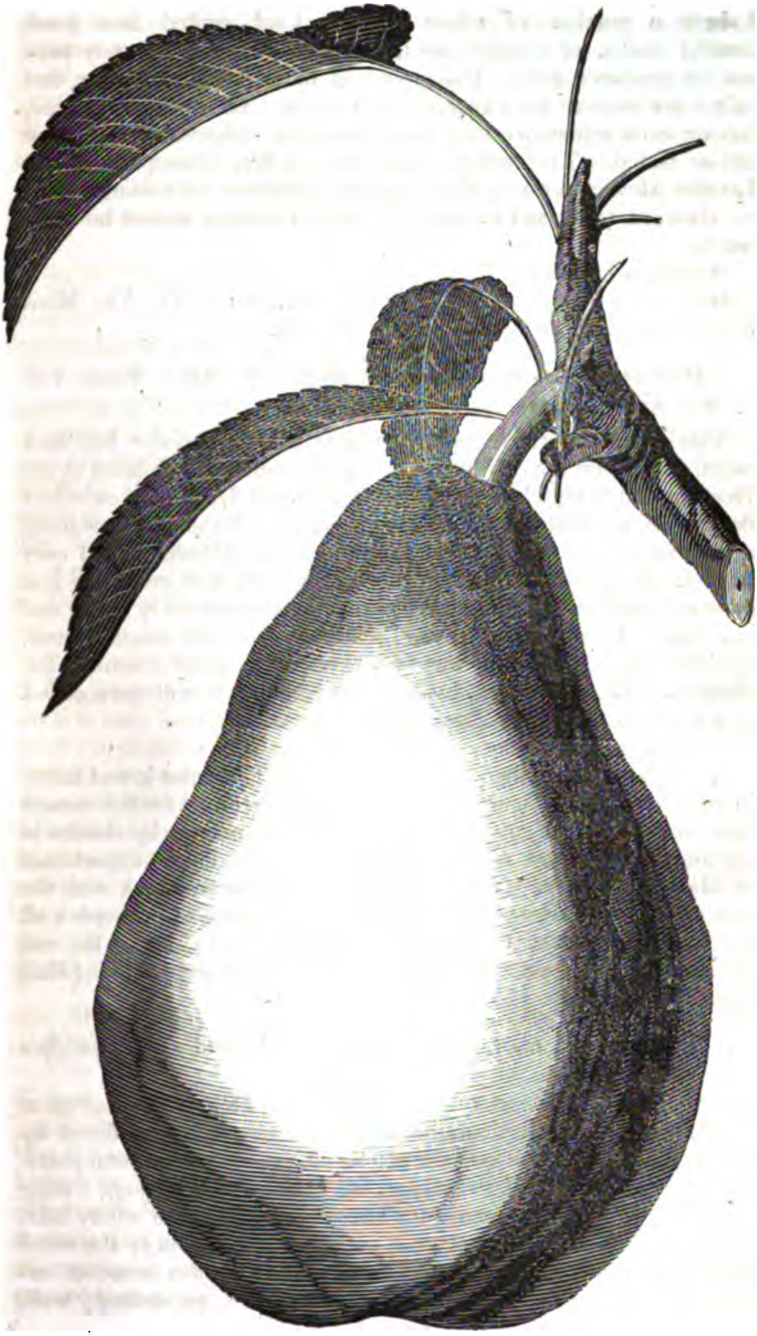
This very valuable variety, so extensively cultivated in the vicinity of Boston, is a great favorite with the public. The farmer, as well as the gardener, has too often reaped the value which has arisen from having their old trees grafted with this variety; it is almost sure to give certain returns, and is more eagerly sought after in our market than any other autumn pear. Very often those of large size, and fully ripe, have commanded the high price of one dollar per dozen. The tree is a free grower, a constant and great bearer, and the fruit ranks with those of large size, often weighing ten and twelve ounces each. Skin yellow, little russeted occasionally, with a tinge of red on the sunny side when ripe. Flesh melting, full of juice, and much resembling in taste the St. Michael; but will not keep near so long when mature; it ripens, however, fifteen or twenty days sooner. The two trees growing in the garden of E. Bartlett, Esq., Roxbury, from which have originated all the trees in this vicinity, were selected in England, in 1799, by Mr. James Carter, of Boston, for Thomas Brewer, Esq., who then owned and made his residence on the estate now occupied by Mr. Bartlett. I have visited the trees every season for ten years past, and have always found them in full bearing except once. It is very singular that no other person (to my knowledge) has imported and fruited this variety in the country.

The Williams Bonchrétien originated in the garden of Mr. Williams, a schoolmaster in Aldermaston, in Berkshire, England, about forty years since.

[The annexed Engraving of this valuable pear is one we have copied (with the permission of the library committee) from a beautiful and very correct painting in the possession of the Massachusetts Horticultural Society.—*Conds.*]

MARIE LOUISE. *Hort. Trans.* Vol. v. p. 519. *Pom. Mag.* t. 122.

This excellent variety has been exhibited at the Massachusetts Horticultural Society, and has been highly approved of by their committee. But I believe they were raised on quince stocks;



I have a number of scions of this kind grafted into good, healthy stocks, for standard trees, seven years since; but they have not yet produced fruit. The growth of the wood is not strong, and only a few blossom buds appeared last season; no fruit was matured, but we must remember that the season was unfavorable, as I have before stated. This variety, according to Mr. Thompson of the London Horticultural Society's garden, produces exceedingly well on standard trees, and he remarks that no garden should be without it.

Ripens in October.

It was raised by the Abbé Duquesne, and sent by Dr. Van Mons to the London Horticultural Society in 1816.

Duchess of Angouleme. *Pom. Mag.* t. 76. *Hort. Trans.* Vol. vii. p. 176.

This pear, the most superior of all late autumn varieties, has been raised with us on the quince stock. The specimens exhibited at the Horticultural Society's room, were very large in size, and of excellent flavor. S. G. Perkins, Esq. has raised some of the fruit, weighing *sixteen* ounces each. It is certainly the most splendid pear I ever beheld. It comes into bearing very early from the graft, and is a constant producer. The growth of the tree is remarkably strong and luxuriant. I have grafted several scions on some old standard trees, and the first year's growth was very strong; the wood resembles the Bartlett. Mr. Thompson, before named, thinks it will not succeed as a standard tree in the climate of England.

It ripens in November.

This variety was called by the above name "because it was found in 1815, when the reigning family of France returned for the second time to the head of government. It was discovered by chance in the hedges of a forest of Armaillé, near Amiers, in the department of Maine and Loire. The proprietor of that forest, struck with the size of the fruit and its excellent qualities, removed to his garden all the plants of that variety which his wood contained; and, at the end of five years, this pear was common in the neighborhood." (*Bul. Agr.*, Juil 1827, p. 113.)

Tillington. *Hort. Trans.* Vol. iv. p. 521, and of Mr. Knight's present.

The fruit of this variety, exhibited by the Hon. John Lowell at the Massachusetts Horticultural Society's room, was considered by the committee as deserving to be placed among our best autumn pears. Fruit medium size. Flesh melting, full of rich and brisk juice: color of the skin yellowish green, with streaks of red on the sunny side. The scions on my trees have not yet come into bearing; the wood has grown rather slow, but the foliage remains on the branches until hard frosts. They stand our coldest winters exceedingly well, and I have no doubt but this variety will be extensively cultivated when its good qualities are better known.

It ripens from the latter end of October, and keeps well.

This variety was raised in the village of Tillington, near Hereford, England, from seed produced from an autumn Bergamot pear, that had been impregnated with the Jargonelle. Specimens of the fruit were first presented to the London Horticultural Society by T. A. Knight, Esq. in 1820.

BEZY VAET. *Hort. Trans.* Vol. v. p. 407.

This excellent autumn pear came into bearing with me the last season. Owing to the early hard frosts, I think they did not mature sufficiently to arrive at their full flavor, though part of them were considered fine. Nearly all the leaves fell off before the proper time of ripening, which also prevented the fruit from being fair specimens. The tree is a very vigorous grower, upright branches, and produced fruit the fourth year from the graft. All the pears were uncommonly perfect. The tree is now full of prominent blossom buds. Fruit medium size. Flesh buttery, melting, juicy and perfumed: color of the skin pale green, little russeted.

Ripens in November, and will keep several weeks.

Raised by M. Parmentier at Engheim.

NATIVE PEARS.

In giving you a description of our good native pears, I cannot here omit to own the very strong partiality I have in their favor. They have originated in, and are inhabitants of our own gardens; and they seem doubly valuable to us from the circumstance that they have no rigors of climate to contend with, but bear our most severe cold weather without the least injury. They are, also, in general, constant bearers, and although the flavor of some of the varieties may not be as rich and highly perfumed as those of Flemish origin, still, they are so far superior to many foreign kinds, yet old inhabitants of our gardens, that they will be in a few years, as they deserve to be, generally and extensively cultivated.

SECKLE. *Coxe. Pr. Pom. Manual*, p. 139. *Pom. Mag*, t. 72. *Hort. Trans.* Vol. iii. p. 256. t. 9.

This superior pear is still growing on the farm of the late Stephen Gerard, Esq., near Philadelphia. When I visited this place, a few years since, in company with Joshua Longstreth, Esq., I noticed that the tree was in excellent health, although the top of it was much broken by high winds. It grows in a strong rich soil, on the border of a fine tract of land near the Delaware river. Probably the tree is about fifty or sixty years old. It will be unnecessary to say it has no superior in flavor, and very few equals. It is greatly to be regretted that it does not belong to the large class of pears.

Ripe in October.

The Massachusetts Horticultural Society have a beautiful drawing of this variety in their possession.

Dix. *Pr. Pom. Man.* p. 142. *N. E. Farmer*, Vol. viii. p. 161.

The original tree I have visited two or three times each season, for the last three years. It has produced fruit annually uncommonly fair and of large size, several weighing from six to ten ounces. It is now full of blossom buds for this year. When we take into consideration all the excellent qualities of this variety, its large size, fine flavor, and beautiful appearance, we must own that it is a choice gift of nature. The fruit somewhat resembles the St. Germain. Flesh melting, and full of juice; flavor between the St. Germain and Bonchrétien—more like the former, but a little saccharine like the latter. Skin, when mature, of a deep yellow or gold color, with a bright tinge of red on the sunny side. The scions on the trees in my garden were cut from the original, and were grafted in the year 1831. They are of free growth, and this year they are full of blossom buds.

Ripe from the middle to the end of October.

This pear originated in the garden attached to Madam Dix's mansion house, situated in the south part of Boston, and has, in consequence, been named in compliment to this lady. It sprung from the seed about twenty years since, and first produced fruit in 1826.

A correct painting of this pear is also in the possession of the Massachusetts Horticultural Society.

Heathcot. *N. E. Farmer*, Vol. vii. p. 82.
Gore's Heathcot. *Prince's Pomological Manual*, p. 143.

This excellent variety is a constant bearer; the trees make fine, healthy wood every season. They retain their foliage until late in autumn. Not a branch or twig, as I have yet observed, has been winter killed. The scions on my trees I took from the original; they were put in good, healthy stocks, growing in a rich mould, on a clayey subsoil; they have grown luxuriantly, and came into bearing in 1833. Last season they were full of fine pears, which matured well; the tree is now very full of blossom buds for this year. Fruit fair, and over medium size. Flesh melting, full of sprightly juice, flavor somewhat similar to the St. Germain. Skin, when mature, of a pale yellowish green, tinged with red on the sunny side, occasionally with small black spots.

It ripens in October.

This variety originated in the garden of the late Hon. Christopher Gore, at Waltham. It came into bearing in 1824, and is now about twenty years old. The fruit was first exhibited at the Massachusetts Horticultural Society in 1828, from which their committee had a fine painting executed, which now decorates their room.

FULTON. *N. E. Farmer*, Vol. vii. p. 386.

This pear will only rank second rate; one of its good qualities is, however, great and constant bearing. The tree is a free grower, not subject to be blighted, and comes into bearing the fourth year after grafting. The fruit must, however, be picked and matured in the house. The flesh then becomes buttery, melting, and full of rich juice. If suffered to remain on the tree, it becomes breaking, dry, and without flavor. Skin dull yellow, and covered all over with russety spots.

Ripe early in October.

This variety originated on a farm formerly owned and occupied by a gentleman of the name of Fulton, in Brunswick, in the state of Maine. The seed from which it sprung were carried from this state by his wife, when on a visit to her friends—named in compliment to Mr. Fulton by John Abbott, Esq. of Brunswick. Specimens of this pear were first exhibited by this gentleman before the Massachusetts Horticultural Society, at their annual festival, September 19th, 1829.

ANDREWS. *N. E. Farmer*, Vol. viii. p. 266.
Amory, } *of some collections.*
Gibson, }

This most valuable pear continues in high favor with the public, and is often sought after by the market-man. The tree is a free grower, and very hardy. I have never seen a branch winter killed or blighted. It is a constant and certain bearer. Fruit medium size, fair, and free from dark spots. Flesh buttery, melting, perfumed, and very full of agreeable juice. Skin pale yellowish green, with a very faint tinge of red on the sunny side.

Ripe from the middle of September to the middle of October.

It will be perceived that I have placed this variety under the head of native pears. The evidence is not positive, I acknowledge; but the circumstances connected with its origin are strong, and in its favor. They are as follow:—Mr. Andrews, of Boston, was the gentleman who introduced this variety to the public; he had a fine garden in Court street, where he cultivated other kinds. The tree was removed from Dorchester about fifty years since, and I draw the conclusion that it is one of our native pears, cultivated by our farmers at that time. There were then no nurseries in this vicinity; the pastures and woods were full of wild varieties, some of which I have known to bear fruit worthy of cultivation in our gardens; and, were it not for the high-sounding names attached to many of the foreign kinds which are annually introduced, I am confident they would be cultivated and ameliorated, so as to be classed with some of our existing fine varieties.

Harvard. *N. E. Farmer*, Vol. viii. p. 82. *Pr. Pom. Man.* p. 145.
Sugar Pear, } *of some collections.*
Boston Epargne, }

This variety is highly deserving of cultivation as a market pear. The tree grows strong and upright, but does not come into early fruiting. Fruit above medium size. Skin dull green and russety. Flesh melting, full of juice, and considerably perfumed.

Ripe by the first of September.

Originated in Cambridge, Mass., and named after the founder of the Harvard University in that place.

Wilkinson. *N. E. Farmer*, Vol. viii. p. 126.

This variety the committee of our Horticultural Society decided to be a "great acquisition to our gardens." I certainly think it to be so. The tree is a free grower, with strong and upright shoots, and comes into bearing early. My trees produced a few fruit in 1833, (the third year from grafting,) and last season they bore abundantly. Very few ripened, however, they having been blown off by a violent wind in August. The scions are now full of blossom buds. Fruit medium size. Skin dark green, becoming yellow when fully mature, with a shade of dull red on the side next the sun. Flesh melting, and full of highly-perfumed juice.

Ripens in October, and keeps till the end of November.

This variety originated in Cumberland, R. I., on the farm of Jeremiah Wilkinson, and specimens of the fruit were first presented to the Massachusetts Horticultural Society in 1829, by Stephen H. Smith, Esq., Providence. The committee named it the Wilkinson pear, in compliment to the owner.

Cushing. *N. E. Farmer*, Vol. viii. p. 113. *Pr. Pom. Man.* p. 144.

This superior native, one of the very best of autumn pears, continues to increase in public estimation. The scions on my trees came into bearing the fourth year after grafting, and are now full of blossom buds. It is a free growing variety, not subject to blight, and the branches never get winter killed. The old original tree, from which the scions were cut, grows on a light soil, and has borne fruit every season—some seasons more than others. I have visited this tree twice within the last three years, and have annually received a basket of the fruit, which was always fair. Fruit medium size. Skin light green, turning to yellow when it remains on the tree, with a brownish blush on the sunny side. Flesh buttery, melting, fine flavor, juice sprightly and abundant.

Ripe in September.

This variety originated on the farm of Washington Cushing, Esq. of Hingham, about forty-six years ago, after whom it was named. Specimens of the fruit were first presented to the Massachusetts

Horticultural Society, at their annual festival, in September, 1829, by Benjamin Thomas, Esq. of Hingham.

WASHINGTON. *Kenrick's New Am. Orchardist*, p. 187.

Robertson, } *of some collections.*
Namen's Creek, }

This beautiful variety I have never seen growing on the tree, but have tasted of those which have been exhibited at the Horticultural Society: they were delicately beautiful. The tree is a good bearer. Fruit medium size. Skin pale yellowish green. Flesh melting, juice abundant, sprightly, with an agreeable perfume.

Ripe the latter part of September.

When I was on a visit to Philadelphia a few years since, Joshua Longstreth, Esq. stated to me that it originated on the farm of General Robertson, at Namen's Creek, in the state of Delaware, about twenty miles from Philadelphia, on the road to Baltimore. Specimens of the fruit were first exhibited at the Massachusetts Horticultural Society last season, by the Hon. John Lowell, Roxbury, and R. Manning, Esq., Salem.

LEWIS. *N. E. Farmer*, Vol. vii. p. 266. *Prince's Pom. Mag.* p. 140.

This good variety comes to maturity very late, and, in unfavorable seasons, the cultivator is occasionally disappointed with its produce, as I have frequently heard. But my opinion is still in its favor; I have seen too many good crops to give it up. Last season some matured so as to acquire their flavor, but the greater part were inferior. All our late pears will be uncertain in bearing, and subject to many contingencies, from late springs, cold summers, early frosts, high winds, &c. Fruit medium size, somewhat like the Crasanne in appearance. Skin dark green, with cloudy spots. Flesh whitish, very melting, buttery, juicy, with an agreeable flavor.

Ripe in November, and keeps well till the middle of February.

This pear originated in the garden of John Lewis, Esq. of Roxbury, after whom it has been named. The tree is supposed to be about forty years old. A fine painting of this variety, taken from a pear from the original tree, is in the possession of the Massachusetts Horticultural Society.

BLEEKER'S MEADOW. *Pr. Pom. Man.* p. 215.

This variety has been spoken of in high terms, and said to compare in all respects with the Seckle, and the size twice as large. It has been very much overrated in quality and size. It is, however, a beautiful small pear. I had five scions on one tree, which bore last year (the fourth from grafting) four dozen fruit. The branches are now full of blossom buds. Fruit considerable under medium size, of the Bergamot form. Skin deep yellow. Flesh buttery and juicy, with a pleasant perfume, rather musky, flavor resembling the old Minot pear.

Ripe in November.

Said to have originated near New York. Specimens of the fruit first presented to the Massachusetts Horticultural Society last season.

CLAPP. *N. E. Farmer*, Vol. viii. p. 51. *Prince's Pom. Man.* p. 143.

The original tree of this variety continues to grow finely, and seldom fails to produce a good crop of fruit annually. The tree continues to drop its foliage about the first of September. Fruit under medium size. Skin yellowish, with faint touches of red. Flesh whitish, melting, juicy, the flavor much resembling the old Catherine or "Kattern" pear.

Ripe the middle of August.

This variety was raised by William Clapp, Esq. of Dorchester about twenty-five years since. It has been named in compliment to him. Specimens of the fruit were first presented to the Massachusetts Horticultural Society in 1829 by Mr. Clapp.

In the cultivation of pears, I have committed two great mistakes—one was, continuing to hold on to the old varieties for so great a length of time. Thirty years since, they produced fruit annually, and, by their constant and sure crops, I became much attached to them. Now, however, only three remain, viz.—the Crasanne, Chaumontelle, and the Jargonelle. I shall engraft the two former the coming spring, and if the latter continues to deteriorate as it has for the last three or four years, I shall engraft that also. Several of my trees are mossy, and the branches show strong marks of old age. The other was,—and one which every cultivator should avoid,—cultivating too many new varieties (one hundred and twenty-eight), without a better knowledge of their quality, than that acquired from general information. I am fully sensible I shall be obliged to cut out more than half of my varieties, and it is very injurious to always be engrafting and cutting trees. The time has now arrived that a selection may be made with great certainty.

Yours, SAMUEL DOWNER.

Dorchester, January 24th, 1835.

ART. II. *Some Remarks on the Disadvantages which Gardeners labor under; with Hints on the Importance of giving more Attention to the Preparation of Fruit Borders, &c.* By MR. T. WILLOTT.

SIRS,

I TRUST the following remarks will not be misconstrued, as they proceed not from theory alone, but from actual practice and observation. In England and America it is generally known, as well as by many practical gardeners and horticulturalists in this vicinity, that the reason so few good fruits and flowers are produced for exhibition and for the table, proceeds not from a deficiency of skill, but from the want of time, so necessary for the production of fine and perfect specimens; in consequence of which the practical gardener is unable to compete with those who have every convenience to enable them to raise a variety of rich and rare productions. It is well known to every cultivator, that his ground ought to be well prepared, or he cannot expect to reap a good crop. In order to accomplish this, it requires a longer period to execute the work than most gardeners are allowed; and for the want of proper time and materials, he fails in some of the most important branches of his business. After having prepared his land, the seed is sown, or the tree planted; next comes the attention necessary to perfect the crop, and this part of the work often proves the most troublesome, and frequently fails by some unforeseen accident, or from a multitude of visitors that too often intrude upon his time: I know of no class of men that are more troubled with too many guests than the gardener. Some seasons are very unfavorable for delicate crops, but this, of course, the gardener is not answerable for: there are other reasons why some fail in producing good crops; one of which is allowing them to remain too thick; and for this reason they do not succeed in producing what are considered by horticulturalists good specimens. This is a point that every experienced gardener endeavors to guard against, but he is sometimes overpowered with the pressure of work, in consequence of which he cannot do as he otherwise would. There are many who plant fruit trees, shrubs, &c., without making any preparation suitable for their growth and prolific bearing; this proves an unprofitable way of planting; but to procure good specimens of fruit, it is necessary to begin the work judiciously, by laying a good foundation before the tree is planted; and here it may be proper to point out such kinds as require the most particular attention.

The grape in this climate, I consider, requires the greatest skill to ripen it to perfection; but of its culture I shall for the present pass over. The peach in England requires the gardener's most particular attention to enable him to grow large and fine-flavored fruit; and its culture is, every year, becoming more difficult in this climate. In the former, it is grown against high brick walls, where it arrives to great perfection, and is deservedly admired; and it is one of the young gardener's greatest achievements in horticulture, to train it in a beautiful style to the wall; the peach is planted generally on a south and south-west aspect, and as much trouble is taken to prepare the border, as is taken in this country to make a border for the grape vine; it also requires as much attention to select and ripen the fruit bearing wood for the ensuing year, as it does to encourage the fine clear cane of the vine, for a good crop of grapes. Those who have not seen or read of the attention that is necessary to be given to the peach in England, would hardly credit it; the summer season is the time that care is requisite, to keep the young fruitful wood thin, and close to the wall, in order to ripen it well. I am confident that the peach will not thrive long in this climate, without similar attention is paid to its cultivation. The apricot is also grown in the same way on a westerly aspect, and all other choice fruits for the table are planted in such situations as to come in at different seasons.

I have seen the grape grown to perfection about London, where the roots have been planted ten feet below the side-walks, and the vines trained against the houses, and where little or no preparation has been made for them but the waste of bricks from the building; the kinds were the old Sweet-water, and Miller's black cluster. I have also seen the grape in the west of England, one hundred and sixty miles from London, do equally as well as those near the city; they sometimes make a trestle, on the south roof of their houses, to train them on, and procure most excellent fruit; the reflection from the heated slate roof ripens them in good season. It is necessary, in order to produce good specimens of the apple, to pay better attention than is commonly done. In Europe they prune the trees every spring, clean off the rough bark, keep the trees free from suckers round the roots, and manure and dig round them once or twice a year; by so doing they have fine clear fruit; it is a very good plan, and one that is frequently adopted, to plant potatoes in beds or rows, between the trees; this I consider, for two reasons, to be a good system; you get two crops off the same ground; and, by keeping it loose round the trees, the roots get the benefit of the sun and rain. You will see by observation, that where trees are not dug round in grass fields, they soon get covered over with moss; in consequence of which the fruit is small, and of a bad quality. There are many persons who have followed gardening for a few years, and have been very successful in what they have undertaken; but we are not always to expect from them general information; they do not view, probably, the gardener's work in all its different branches. Let the gardener's work be looked at by the practical man, who has followed it for years, and he will be the best judge to decide between good and bad management.

Yours, T. WILLOTT.

Roxbury, Feb. 6th, 1835.

ART. III. *On the Propagation of the Grape Vine; with Observations on its Management, Pruning, &c., in the Green-house and Grapery, and the Formation of Vine Borders.* By J. W. RUSSELL.

[Continued from page 48.]

GENTLEMEN,

I WITH pleasure continue my remarks on the culture of the grape. It will, perhaps, better accord with my plan, to give some practical details on the formation of vine borders, as I suppose the plants to be in readiness, and certainly the preparation of the borders should precede the planting of the vines. But before I proceed to give my ideas on this head, I beg leave to make a few remarks. In perusing the second number of your Magazine, I was struck with an extract (page 62) entitled, " Propagation of Vines on the Coiling System, by John Mearns."—In this Mr. Mearns asserts that the great advantage of the coiled branch is, the extraordinary space of time gained over the single eye system, or by cuttings, or even by the usual mode of layers. It is rather astonishing, especially as we must suppose Mr. Mearns to be a practical gardener, that he should have forgotten that this extraordinary advantage is only for one season (over the single eye) ; it is well known that a vine can be grown from a single eye under glass, the first year, from fifteen to twenty feet in length, and proportionably strong, and can be fruited the second. I believe I do not exaggerate in saying this much, that as many bunches of grapes could be thus obtained, and of as good a quality as from the coiling system. It will be perceived by this that the advantage is not either so very extraordinary, or so great as might be supposed. The second year of fruiting the vines from eyes would make up for the time lost the first season, by producing twice the quantity of grapes or more; and it strikes me very forcibly, of a better and finer flavor than can be obtained from vines grown in pots. I wish it to be understood, that the vines I speak of are supposed to be growing in a well prepared border. Mr. Mearns further adds,—" a vine excited to a high degree of luxuriance, is neither the most fruitful nor produces the finest or best grapes; I have seen Hamburghs, from three to six and eight pounds weight each bunch, the vines comparatively weak, and the vine border very shallow, and by no means rich. As curiosity will be created by such a remark, I beg leave to state, that such grapes were repeatedly produced by a Mr. Minnett, formerly gardener to Mrs. Powes, Berwick House, near Shrewsbury."

It is more than probable, that after Mr. Minnett left this situation, no more six and eight pound bunches of grapes were produced; it may be asked for what reason, as he could not do any injury to the vines, without running the hazard of his successor's detecting it. I do not suppose that the vines would be mutilated in any way whatever, but simply that the *excitement was gone.* I confess that I am of this opinion, that very few fine grapes could be grown, especially to the enormous weight of six or eight pounds each bunch, either in England or America, without the aid of some powerful stimulus.

I have been acquainted with the management of grape vines upwards of twenty-five years, the major part of this time in England, and have never seen large bunches of grapes produced from vines that had the least appearance of weakness; but have invariably noticed the largest and finest clusters, on strong, luxuriant wood. If I could have my choice of wood for producing large bunches, I should choose the largest growths, with this provision,—the wood should be round, plump, short jointed, and well ripened.

This is a point that ought never to be lost sight of; the ripening of the wood is one of the principal agents in producing fine grapes; for it must be considered that strong, luxuriant wood is generally a much longer time in ripening the fruit than weak; and I have no doubt that the reason many persons have failed in fruiting strong wood, was on account of its being soft and pithy, and of course could not be expected to give a good crop of fruit.

The remarks made by Mr. Mearns on the grape vine, which I have quoted, may be the means of deluding hundreds, if we are to believe it to be a fact, that there is no necessity of preparing a rich compost for the vine; but simply to plant them in a shallow border, by no means rich, with the expectation of having bunches of fruit that will weigh from three to six and eight pounds each; it would be nothing short of folly to attempt to beat this system; but there is a doubt in my mind attending the practice, for if even what has been stated is correct, it is one instance in a thousand, and should by no means be followed with any hopes of reward.

In the formation of a vine border, I shall first recommend to those who wish to make a good one, to procure, if possible, the top sod of an old pasture field, where cattle and sheep have been pastured for years; this should be preferred to any other, as it would pretty near make the compost of itself. However, this kind of sod, which is certainly the most desirable, cannot always be obtained; but the nearer we approximate to it the better; the sods should be dug up with about four inches of the soil adhering to them, the whole to be taken as near to the spot where the border is to be made, as practicable. By so doing it will save considerable labor in wheeling, &c., remembering to throw the sods up into a round heap, or to to make a ridge of them; either method will answer the purpose. In about two months, or a greater length of time, the compost should be turned over, breaking it up quite small and fine, with a spade or shovel, and mixing the whole well together; this thoroughly done, make it up into a snug heap; and it is all that is necessary, until wanted for the border.

In the next place prepare for some old rich manure, either from horses or cows, or a mixture of each; such as has laid in a heap for one or two years, until it has become more in appearance like a rich heap of mould, than *manure*, is much better than that rank, and strong; such as can be obtained at slaughter-houses, &c. should not by any means be used for this purpose, unless it has laid for two or three years, and become as just mentioned. If such can be procured I should recommend it to be mixed with the sods in the following manner:—to three wheel-barrows full of the sods add one of the manure, and so continue on until the whole is finished; if the compost appears to be of a stiff, binding nature, a few cart-loads of coarse sand (and *bones*, if they can be had) will be found to be of great service in keeping it open. The largest and finest grapes I ever saw in England, were produced from vines growing in a compost similar to what is here recommended.

Those who wish to make such a provision for the grape vine, as above stated, ought to begin to collect the materials six or eight months before they will be wanted for use.

Yours, J. W. Russell.

Mount Auburn, Cambridge, Feb. 10th, 1835.

(To be Continued.)

Art. IV. *Detail of a Method adopted in Planting out an Orchard of six Acres with Apple and Pear Trees, in* 1830 *and* 1831; *Deep Planting dispensed with.* By B. V. F.

All the varieties of fruits known to the writer, that were deemed important to the wants, or embellishments of the garden or orchard, had been procured previous to the organization of the Massachusetts Horticultural Society. By the formation of this excellent society, however, and the exertions of several of its members, a great number of new and valuable fruits were brought into notice, by its extensive correspondence with other similar societies in Europe, and on the continent. Such as had been tasted, or highly recommended by the committee, were deemed of sufficient value and importance to be added to the selection, which embraced a large number of varieties. A piece of land was decided upon, which was thought the best suited for the growth and future health of the trees, the embellishment of the place, and least liable to be encroached upon by future alterations of improvements upon the farm.

Agreeing with Dr. Johnson, that "with method, almost any thing may be done, and without method, nothing well done," the following system was adopted:—A plan of the land was procured; the distances from which each tree was to be placed from the other, each way, was decided upon, which averaged about thirty-three feet; a reference book in connection with the plan of the land was next procured, and on it was designated each variety of tree, in its relative position. The land was then prepared, by taking from its surface all the stones, stumps, trees, shrubs, bushes, &c., all holes or uneven places were filled up, and the ground made as level as possible; the land was then ploughed deep, with the sod smoothly inverted; it was also harrowed five times lengthwise of the furrows, previous to planting, which caused the soil to be broken up fine, without disturbing the sods.

The trees were selected from the various nurseries around Boston, Salem, New York, Albany and Philadelphia, amounting to one hundred and eight varieties of apples, and forty-two of pears,—in all two hundred and twenty trees. The trees were all forwarded to me in the fall of 1830, and placed in a trench dug sufficiently deep to cover the roots, and secure them from the frosts and cold of winter, to be ready for planting out in the ensuing spring. Each variety had been noted and labelled while in the trench, in such a manner, as to guard against the loss of their names. Previous to setting out the trees in the spring of 1831, in their intended places, the land had been well manured, and harrowed in. Placing the plan on a board with the reference book, the respective place of each tree with their proper distances was easily found with the aid of a surveyor's chain; from one to two inches only of the soil was taken from the sod, and the trees carefully planted,—previously to which, however, they were properly and judiciously pruned, and the roots trimmed of all broken or bruised fragments, if in some instances it could be said they had roots. In this manner the whole number were placed out, and covered with a little free rich mould, not *over* two inches, puddled with river water and gently trod. This was done in the last week in April, and serious doubts were apprehended whether they would in this manner stand alone. The land was planted between the trees with corn and potatoes, without further ploughing, and an excellent crop was obtained; but *two* trees died, and only four more required additional soil on their roots; and so far, I have never had trees do better, during twenty years' experience, in the management of an orchard of twenty acres. I have no doubt, had the land been deeply trenched to the depth of one or two feet, and from six to twelve feet in diameter, where each tree was set, they would have done much better; but this is too forbidding to most persons.

I have only aimed in this communication to give you what I consider practicable. In all cases I would impress upon the gardener, orchardist, or farmer, to avoid deep planting, as it is not necessary to preserve trees from high winds, and is absolutely deleterious to their future progress and health. Yours, B. V. F.

Boston, Feb. 10*th*, 1835.

Art. V. *On the Cultivation of the Purple Variety of Egg Plant (Solànum ovìgerum.)* By the Conductors.

The White Egg Plant is an annual, a native of Africa. It was introduced into England in the year 1597, and has ever since been cultivated as an ornamental green-house plant. It grows about two feet high, with somewhat pendent branches; the flowers are of a pale violet color, and are followed by a large berry, or fruit, of an oval shape and clear white color, very much resembling, when not overgrown, a hen's egg.

The original species, the white, is seldom made use of, but the purple variety is, by the French and Italian cooks, generally used in stews and soups; and dressed in different methods, it forms a very delicate dish. In the East and West Indies it is used in like manner, and is also cultivated for the general purposes of the love-apple.

We have raised specimens of the purple, which have weighed between three and four pounds. We observed at the Horticultural Society's exhibition last fall, some plants in pots bearing one or two fruits of very large size; and we have occasionally seen them in our markets, of fair quality; they seem to have been almost wholly unknown as a culinary vegetable, and have generally been sold at a price, which would not pay the marketer for his trouble in bringing them to the city. From this cause, their cultivation has been neglected, and they are now seldom to be found. Within the two past years, however, we have known some, in the early part of the season, to command a good price, and we doubt not but in a few years they will be as eagerly sought after as the Tomato.

Our New England summers are not of sufficient length to bring to perfection this vegetable, unless the seeds are planted in a hot-bed in the month of March, and the plants transplanted to the open garden in May or June. Those persons, therefore, who have not a hot-bed, cannot expect to raise them, unless they procure the plants from some place where plenty of seedings are grown.

Our method of cultivation was as follows:—In the month of March, we sowed the seeds in a pot filled with light rich soil, and placed it in a hot-bed, the minimum temperature of which was about seventy-five degrees; as soon as the plants were up, we placed them where they would receive the influence of the air admitted into the bed, to prevent their drawing up weakly; for if this is not attended to, the young seedings are invariably destroyed. As soon as they threw out two rough leaves, we potted them off singly into pots, (No. 2,) in the same soil as the seeds were planted. Water was given rather sparingly at first to prevent dampness; but as soon as the plants showed signs of growing, it was given more freely. The heat of the bed was not suffered to decline, as this would check them at once. In four or five weeks they were again repotted, using pots of the 4th size. In these they remained till May, when they were turned out in the garden. The plants should be set about two and a half feet apart each way, if planted in a bed; but we have grown them on the edges of walks and flower borders, where we not only found them to grow luxuriantly, but were quite an ornament; three or four of their large dark purple fruit, on each plant, having a very showy appearance.

Prepare the soil where each plant is to be set, by first taking out two or three spades full; then fill the hole partly up with old rotten manure, composed of decayed leaves, or dung from an old hot-bed; mix the soil first taken out with this, place in the plant and level off, finishing with a very light watering, if dry weather. If the plants are well rooted in the pots, and the transplanting judiciously done, they will not require shading from the sun. When they show flower, they should have a stake put down to each, to which they should be tied, as the weight of the fruit, as it grows, will be liable to break the branches. No other particular care is requisite throughout the summer.

ART. VI. *Observations on the Cultivation of the early Variety of Potato called Perkins's Seedling.* By SAMUEL POND.

GENTLEMEN,

HAVING repeatedly been requested by you to give an account of my success in raising early potatoes, I send you the following brief remarks:—The early potatoes that have been exhibited by me for several years in succession at the Hall of the Massachusetts Horticultural Society, and so frequently the first in the market, were raised from the variety generally called Perkins's seedling. I first received a small quantity from my friend, Solomon Perkins, Esq., of South Bridgewater. They were the produce of a kind which he raised from the potato balls, a year or two previous. Whether or not he adopted the method pursued in England by many of the most scientific cultivators, of cross impregnation in the parents of this variety, I am not aware; but that this kind is much earlier in coming to maturity, than any other raised about Boston, is too well known to need repetition.

The manner in which I have planted the potato is somewhat different from that generally pursued by most gardeners; the soil where they were grown was deep, and rich. Early in the spring I usually gave the ground a deep ploughing, after which it lay exposed till the time of planting;—this was done according to the earliness or lateness of the season—sometimes early in March, and again not till the latter part of the month. When ready for sowing, drills were made three and a half feet apart. The manure that I generally made use of, was very strawy and coarse; I have had good success by using the covering of leaves, sea-weed, &c. taken from strawberry beds in the spring;—spreading it in the furrows. The potatoes that I have generally selected for seed were fair, and about the middle size; I prefer such, to those that are large and overgrown. The small ones, however, I invariably refuse, as they do not come forward so early, and never grow vigorously. It is too frequently the practice with many persons, to sell all those large and fair, and plant the small ones remaining on hand. Nothing can be more prejudicial than this, for it soon causes a deterioration in size and quality, which by some is supposed to be a mixture with some other variety. The potatoes were cut in half, and planted about six inches apart. I omitted covering them for three or four days, unless frosty weather, as I found that they were apt to rot; but by leaving them to shrivel for a short time, and then covering them at once, they started much sooner and made stronger shoots, though it is characteristic of this variety never to make strong vines. When they were hoed, I was careful they were hilled up very sparingly, for when covered too deep I observed their flavor was inferior to those grown where the soil was more shallow. I have tried a number of varieties which were reputed to be very early, and also of excellent flavor; but I have never found any of them so early as the Perkins seedling, or any that would so well repay all the trouble bestowed on their cultivation. The size of this variety is large, some that I dug on the *13th of June*, 1830, measuring *nine and a half inches* in circumference, and perfectly ripe. The potatoes are of excellent quality; where this variety has been raised in the country, some distance from the city, it has been preferred to almost every other, exclusive of its earliness, for yielding large and abundant crops.

I have now mostly given up the raising of potatoes, having my ground chiefly occupied with grape vines, &c. Among other varieties, is one I have raised from seed, the fruit of which I have once or twice exhibited to the Massachusetts Horticultural Society. In some future number I hope to give you an account of its origin, together with some observations I have made, in raising several vines from seed of the Isabella, &c.

Yours, SAMUEL POND.

Cambridgeport, Feb. 6th, 1835.

ART. VII. *Observations on the Cultivation of Annuals; with an Account of those choice and beautiful of late Introduction; and Remarks on the Varieties most suitable for planting in Masses.* By the CONDUCTORS.

THE cultivation of annual plants is so common, by every individual possessing a garden, that it may seem unnecessary to have recourse to a Magazine for further information. It is true, that many of the old inhabitants of the flower border need no care to produce their beautiful flowers, and some are almost as troublesome to the gardener as weeds. It is not to these, however, that our remarks are intended to apply. A few only, of those which have been long cultivated, we shall consider as deserving of any particular notice.

Since the first introduction into our gardens of that beautiful and showy plant, the Calliópsis bícolor, (formerly Coreópsis; discovered by that excellent botanist, Thomas Nuttall, Esq., in Arkansas Territory,) our gardens have annually received new and elegant accessions. These accessions have been generally plants of our own country, although they have come to us through the English gardens and nurseries. A few of the most choice and delicate are Chilean species, but the greater part are natives of that region near the Columbia river, on the North-west coast. Through the exertions of the London Horticultural Society they have been introduced. At great expense they have kept out Mr. David Douglas, a most indefatigable botanist, from whom they have received nearly all their new additions. Many of them have been recently introduced into our gardens, and will probably in a few years take the place of many of the old varieties, which scarcely deserve to be cultivated.

It is to this class of plants, that our flower gardens and pleasure grounds are indebted, for the greater part of their splendor, during the warm and summer months of July, August and September.

Annuals are divided into three classes, viz:—hardy, half-hardy, and tender. The first may be sown in the fall, or early in the spring, without receiving any damage from frost: the second may be sown in the open garden, when all spring frosts are over: the third require the protection of a hot-bed or green-house to forward them, till ready for planting out in June or July. We shall commence with the latter.

TENDER ANNUALS. The seed of these should be sown in pots and placed in a hot-bed, in February or March. When they have made four or five leaves they should be potted into small pots, which should be repeated till the warm weather admits of their being planted out in the garden.

Gomphrèna globòsa (Globe amaranthus). This showy annual, though for years known in our gardens, does not seem to have been generally cultivated. This, we believe, has arisen from many persons not being able to make the seed vegetate. We have heard many such complaints, and the fault is frequently laid to the seedsman. —One instance we have had related to us, where the seed failed ten years in succession. We cannot but commend the patience one must possess, to persevere after such frequent disappointments. Inquiring in what manner the seed was planted, we immediately discovered the cause. The seed is enveloped with a light down or pappus, which should be removed before planting, or else all efforts to make it vegetate will prove unavailing. Nor is removing this covering alone necessary; the seed should be soaked in milk, or milk and water, ten or twelve hours previous to planting. They should be sown in a pot, rather thin, and placed in a hot-bed; when they have six or eight leaves they should be potted into pots of the first size (three inches in diameter), and again placed in the bed, plunging the pots if convenient; in a few days they will need repotting, which should be performed as often as required. The soil should be light and rich, composed mostly of leaves and perfectly decayed manure, with very little loam. They should have plenty of water after the second potting, and placed where they can have the influence of the air, to make them grow stocky. In the month of June they should be turned out of the pots into the garden, where they need no further care. Propagated in this manner, the plants will in autumn be three feet high, and covered with heads of their showy flowers. There are three varieties: Gomphrèna globòsa, G. globòsa álba, and G. globòsa striàta (the latter very rare.)

Impàtiens balsámina (Double balsamine). It is seldom that this beautiful annual is seen growing in its greatest perfection. Generally, the plants in our gardens are small and weak, with only a few spikes of single, or semi-double flowers. Great care is requisite in saving the seed, so as to produce full double blossoms. The seed should be sown in pots in the hot-bed, and the plants treated similar to the Globe amaranthus, as just mentioned. The spotted and variegated varieties are the most beautiful.

Celòsia cristàta (Cock's-comb). This is a showy annual, and when cultivated with care, its large cock's-comb heads make a magnificent show. The seeds should be sown in a hot-bed, and the plants potted into the second size pots, (four inches in diameter.) As they proceed in growth, all lateral shoots should be taken off; and they should not be repotted, till the flowers are somewhat developed. They should then be put into large pots, in a very rich soil, and watered with liquid manure. Treated in this manner the blossoms attain a large size. Two varieties: C. cristàta, and C. cristàta flavéscens.

Salpiglóssis straminea var. picta. This exquisitely beautiful annual we flowered last season, for the first time in the country. The atropurpùrea, Barclayàna, and hybrida, were also flowered in this vicinity: neither of them, we think, are to be compared with the pícta, in splendor. The Salpiglóssises are very delicate plants, and suffer very much by our heavy rains, and high winds. We are inclined to the opinion that they will never be cultivated to any extent in the open border. We had only two plants of the pícta, one of which we placed in the green-house, where it flowered much more elegantly than the other in the garden. The seeds were sown in the hot-bed, and when the plants had made four or five leaves, they were potted into small pots, and again placed in the hot-bed, where they remained until removed to the green-house and garden. The varieties do not seed freely. The soil for the plants in pots, should be composed of loam and leaf mould, with a little sand; too rich a soil causes them to die off, when just showing bloom. The varieties are Salpiglóssis stramínea, stramínea pícta, hybrida, Barclayàna, lineàris, and atropurpùrea.

Schizánthus pinnàtus. This lovely species of plants should be cultivated in every garden. We do not know of any annual, that combines so much delicacy with splendor. They are, however, rather difficult of cultivation, often dying off at the base of the stem, after they have begun to open their blossoms. The first signs of decay are drooping of the foliage; and water is generally administered as a remedy;—this, however, only serves to hasten decay. The roots are very fine and delicate, and it is a superabundance of water that causes the above effects; we have often thought it too rich a soil. The pots should be well drained, and the plants elevated a little in the centre of the pots, to allow the water to pass off freely from the stem, which is the part liable to be affected. The soil best suited for them is leaf mould, rotten dung and loam. We think the Schizánthus, like the Salpiglóssis, will not be generally grown in the open garden, from the same reasons there mentioned. The varieties are Schizánthus pinnàtus, pórrigens, retùsus, Hookèrii, Prièstii, pinnàtus hùmilis and Grahàmii. We hope to favor our readers with a communication on their cultivation, by Mr. Haggerston, gardener to J. P. Cushing, Esq., who has been very successful in his practice.

(To be Continued.)

ART. VIII. *Remarks on Rural Scenery, the Cottage Garden, &c.*

By JUNIUS.

IN reference to the many branches connected with horticulture, "The Cottage Garden" is, perhaps, one of the most rustic features of *Rural Economy.* However neglected this department may seem to be at present, the additional impulse given to horticulture, will, evidently, at some future period, bring into *notice* this interesting branch of rural scenery. The subject does not appear at the first view to invite our attention to the very important consideration of the public welfare, and additional value to property; but on a close investigation, it not only proves inviting, but also of common interest to all classes of people.

The attentive traveller will most generally find the cottage of contentment, where the approaches and appendages are converted into a flower garden; and generally, good morals and industry are the leading characters of its inmates.—The flower garden in such cases is cultivated by a joint attention of the family, from the parents to the younger branches, and the time devoted to its culture is the leisure hours that would, perhaps, be spent to a greater disadvantage. Hence a unison of social industry is combined with innocent and natural pleasure! And often I have seen the younger members of such habitations strolling from their "cot," in quest of wild flowers to decorate their little parterre, with rosy cheeks, in infantile ecstasy. Such rustic decorations always enliven native scenery, and impart to the traveller a theme of moral rectitude.

The additional value to property has another bearing on this species of horticulture; this accrues from the comforts arising from a well-stocked fruit garden, from which the cottager receives the fruit from the trees, as the season ripens the different varieties in their successive progressions. To him the flavor of the fruit is generally agreeable, and being of his own produce, adds to its value. The generous vine too spreads its rustic arbor, and at once forms a cool retreat, while it presents its pendulous clusters of luscious fruit, as an inviting and refreshing repast to its humble pruner. The well regulated vegetable garden also adds to his comforts such esculent food as is not only agreeable to the taste, but in every way conducive to health; and the whole seems to form a pleasing congruity of the contented cottage. And surely, gentle reader, such comforts as these are of too binding a nature to cause that changeable disposition of migrating from one dwelling to another, too often seen and experienced in many places, to the disadvantage of the landlord and tenant. In the above situation every tree and plant appears to the cottager a welcome dweller, and is cherished as such, and a connected comfort arising therefrom endears him to home, whilst the good condition of the property, *proves* to be a pleasing and satisfactory compendium to the estate of the most affluent landholder.

When the intelligent traveller passes through a country where the well-cultivated cottage garden presents itself in general, he at once discovers an enterprising and intelligent community. The valleys to him appear more fertile, the hills more cheerful, the streams meander among the rustic cots in perfect harmony with the scene, and at some future day he discloses to his friends the happy condition of the contented cottager. JUNIUS.

New York, Feb. 4th, 1835.

WE shall be highly pleased to receive a continuation of such remarks on rural improvement. We intend to devote considerable attention to that part of our Magazine, which relates to rural affairs:—Impressed with the belief that it is a species of improvement nearly allied to horticulture, and in a degree, the first step to its more general adoption. The love of flowers and plants must precede a taste for higher and more important objects; and in the proportion that this love is instilled into the mind of the young farmer or cottager, an interest is excited to cultivate and mature the earth's more choice and rich productions. Men who have never made their home the "rustic cot," or in their youthful days wandered through the fields and pastures in quest of the first vernal snowdrop, or the fragrant blossoms of the hawthorn, seldom imbibe a real taste for rural scenery, or feel a desire to improve the appearance of a country as formed by nature. But the lands of the farmer, with taste and care, may be made to add picturesque beauty to the scenery of the country, and to produce fruits and vegetables more conducive to his comfort, if his attention can be turned to rural and domestic improvement. It is a subject of deep interest, and one to which we wish to call the attention of our readers and correspondents.—*Conds.*

REVIEWS.

Art. I. *The Gardener's Magazine, and Register of Rural and Domestic Improvement.* Conducted by J. C. Loudon, Esq., F. L. S. H. S. &c. In Monthly Numbers, 8vo. 1s. 6d. each. Nos. LVI. LVII. for November and December.

In our future Reviews of this excellent Magazine, we shall endeavor to give an account of every original article, extracting such useful information from each, as will be likely to prove valuable and interesting to our readers. In this manner our pages will contain the essence of all that appears each month, and which, from the extensiveness of its correspondents, contains all the improvements in horticulture, floriculture, &c.

Art. 1. *Observations made during a Horticultural Tour through the Eastern Part of the County of Fife.* By Wm. Smith.

This article contains an account of several residences in the County of Fife. Mr. Ingram, gardener to Lord Pitmally, is stated as very successful in raising the Prímula prænitens from seed, "which he attributes to his method of distributing the pollen, and effecting the proper impregnation of the flowers, which is merely to blow occasionally on the flowers of the plants while they remain expanded."

On the seat of the Hon. W. Keith Douglas are a page of remarks. "Here we observed," says the writer, in speaking of the grape, "as well as at other places, that incurable disease, called the damping or shrivelling of the footstalks of the berries and bunches, notwithstanding what has lately been written in this Magazine. Mr. J. D. P. says that the cause is cold damp air, and the cure plenty of fire heat. We are also strong advocates for plenty of heat, air, and water: our opinion, however, is, that the evil is not contained in the atmosphere of the house at all; but is a defect of the roots of the vine, and a want of proper nourishment; for every gardener knows that the disease first shows itself when the greatest demand is made upon the roots by the crop; and if it be a heavy one, the greater is the disease. In our opinion, the best way to cure the disease, or at least, to lessen the evil, is to keep the vine border well mulched until the fruit is fully swelled, and then lightly to fork up the surface of the border. We would also thin well the bunches; give plenty of heat, air and water; and not allow the vine to bear too large a crop."

Art. 2. *A Description of the Moss House in the Flower-Garden at Bagshot Park.* Designed and executed by Mr. Andrew Toward, Gardener to Her Royal Highness, the Duchess of Gloucester. Communicated by Mr. Toward.

This article contains an account of building a house of moss, accompanied with several wood cuts, descriptive of the method and style of building.

"The ceiling of the portico is inlaid with moss of various colors, representing a star and diamonds, with a cornice of pinaster cones. The floor under the portico is a copy of the ceiling in different colored elliptical-shaped stones of a small size. On each side of the door-way are panels formed in the rustic style with different colored woods. The entrance into the house is Gothic; opposite to which are two Gothic windows with stained glass of various colors; under these are four square panels with a large diamond in the centre of each, all formed with moss. Along the sides, between the door-way and the windows, are seats made of stained cherrry tree: above these is a skirting of rustic wood 18 inches deep, the surbase of which projects about three eighths of an inch beyond the moss, to prevent the back from brushing against it. Each side above the skirting is divided into four square panels, and these into a succession of squares. On the right and left of the Gothic entrance is an oblong panel, with between twenty and thirty of the most common species of moss arranged in horizontal stripes. In the spangles over the doorway, are upwards of sixty species of moss and lichens, such are too diminutive in growth to be incorporated into the body of the work. The whole of the above have been collected in and about this neighborhood. Over the seats and windows are three horizontal pieces on a level with the ceiling of the portico, with various devices. These pieces serve as a kind of plancier to the inner roof, which is a common span, with a gable end over the entrance, on which is represented the elevation of the building. The opposite end is hipped in, and has the figure of the English crown. The whole of this design is executed in party-colored moss. The ceiling of the span part of the roof is inlaid with light-colored mosses in the form of diamonds."

Art. 3. *Is a Description with a Design for laying out Kitchen Gardens.*

Art. 4. *On Pruning Forest Trees, and Planting and Managing Belts of Trees.*

An interesting article, and if our limits would allow, we should be glad to copy the whole, which extends to five pages. The raising of trees for timber is carried to a considerable degree of extent in England, and much has been written on the subject. The article concludes thus:—

"The subject of thinning forests and plantations has also been ably descanted upon, and I have no doubt that all the communications thereon have their merits according to local circumstances, the objects of all being to obtain good and useful timber. Waving this subject, therefore, I beg to draw the attention of your readers to that of the thinning of belts. Now, these are generally planted either for the sake of shelter or ornament; the longer, therefore, they can be made to sustain their office, the better; and to accomplish this, not only is a judicious thinning necessary, but a proper choice should also be made in planting such sorts of trees as are disposed to feather themselves down to the ground. The great secret, in the planting of belts and the management of trees afterwards, is to obtain and preserve a mass of foliage through the whole plantation. The idea of getting up a belt thickly planted with fast growing trees, without ever thinning them, is preposterous. I have seen most deplorable instances of this, even to the destruction of the whole; and at the present day, in some parts of the country, you can scarcely take a morning's ride without witnessing and lamenting faults of this kind committed by either the planter or the proprietor. Belts being narrow, a good breastwork should always be provided; particularly on the sides upon which the winds are most injurious: when this is not done, and the trees are left to themselves, their under branches will soon decay, and the winds, thus having full scope, will do serious injury. The case is widely different with single trees which stand exposed, as they get inured to the vicissitudes of the weather; and besides that, they have the advantage of a wider range for their roots, without any competitors to dispute with them, which might draw more nutriment from the soil. Single trees, consequently, soon become more robust than trees in plantations, and are of greater stability. I think the fir tribe is too often, even almost exclusively, made use of in the planting of belts; in cases where these trees are left to themselves, their lower branches soon decay, and, in consequence, admit light to be seen through the interval thus occasioned. This should be always prevented, if possible; and, to this end, the wider the belt is the better: narrow stripes of a few yards in width effect but little, when compared to a belt of considerable breadth; and although the planting, &c., in respect to the former, may be attended with less expense, the result in a few years will be much less satisfactory in point both of beauty and utility."

Art. 5. *On the Rot in Larch, &c.*

The larch tree in England is very subject to rot; and sometimes whole plantations die off. This article is in elucidation of the cause of this disease.

Art. 6. *A Diary of the Course of Culture applied to the Grape Vine.*

A valuable article, the Diary containing the progress of the vine, from the buds first starting to the ripening of the fruit. The forcing, it will be seen, commenced the 8th November.—The varieties of the vine cultivated, are the Black Hamburgh, Dutch Sweet-water, and old St. Peter's. We extract the whole of the Diary:—

1833.	Maxim. by day.	Minim. at night.	
Nov. 8.	-	-	The vinery open. The wood ripe: not pruned. We have had two slight frosts.
9.	60	45	The vines pruned. The vinery shut up. No artificial heat applied.
12.	-	-	Vines pared; the loose and rough bark only taken off.
16.	60	45	Tan pit filled with new tan (twelve loads). Soil, pathway, &c. kept wet.
19.	-	-	Vines washed with soap-suds by means of a painter's sash-brush, the suds being in a tepid state.
22.	60	50	Vines anointed with a mixture of soft soap and black and white sulphur dissolved in warm soap-suds; the mixture applied to the vines at about 100° of heat. Vines laid down on the tan, and moistened with a fine syringe twice a day. The tan forked every other day.
25.	-	-	Forked the border about 3 in. deep; laid on turfy loam and old lime mortar, about 2 in. deep; then old hot-bed dung, well rotted, 2 in.; the roots being near the surface, having been planted as shallow as possible.
26.	-	-	Walls whitewashed with lime and sulphur.
27.	-	-	Laid leaves on vine border 1 ft. thick, and fresh hot dung 1 ft.: protected the above from rains, &c. by reed covers used at other times for pine pits.
30.	-	-	The floor dressed with a coat of road-drift, for the sake of sprinkling.

1833.	Maxim. by day.	Minim. at night.	
Dec. 1.	65	55	Fire heat applied; and all the steam that can be raised produced.
8.	67	56	Sprinkling of pipes and pathways performed at all times, for the sake of steam and moisture. The heat of dung on border, 70°.
15.	69	57	Weather favorable: the nights often 50° or 52°; seldom under 40°. We have had only four frosts; the most intense as low as 26°.
22.	70	58	Buds perceived to be swelling. Heat of dung on border, 90°.
29.	72	59	Ceased to syringe vines. The sprinkling of soil, pipes and path continued.
1834.			
Jan. 5.	74	61	Buds breaking generally. Heat of dung on border, 96°.
12.	76	63	Weather wet and windy: nights 45° to 50°.
15.	78	64	Shoots 2 in. long.
17.	78	65	
19.	79	66	Heat of dung on border, 65°.
20.	79	67	
21.	80	68	Largest spurs 1 ft. long: flower-buds as big as mustard seeds (white): bunches, 1 in.
23.	81	69	Shoots topped at one joint above fruit. If a lateral is produced, it is topped beyond one leaf: if it break again, top it again beyond one leaf.
25.	82	70	
29.	83	71	In dull days, when the weather is cold, and there is not sunshine, give a little air, keeping the temperature at 74°.
Feb. 1.	83	72	Dung on the border nearly cold.
8.	84	73	The flowers of one bunch (near the hot pipes) expanded: the first that have been.
12.	-	74	
15.	85	75	The vines in flower generally.
19.	-	76	Began to thin a bunch or two.
22.	85	76	Was thinning all day (at the top of the house).
March 8.	85	74	The berries of all set now: those of the Hamburgh as large as hazel nuts; those of the Old St. Peter's the size of peas of the early frame kind. For the sake of the Dutch Sweet-water, maintained 76°, instead of 74°, the proper temperature for the Hamburgh. After shutting up at night the tan pit is forked sometimes, and sprinkled every night. The pipes are sprinkled at least eight times in twenty-four hours.
10.	85	73	Begin to give air always when the temperature is 4° above that of the night heat.
12.	85	72	Dung, leaves, &c., cleared off the border, to admit sun heat. &c.: the border forked over.
14.	-	-	Finished shouldering the Hamburg, and thinning the Sweet-water and St. Peter's (neither of the two latter wants shouldering much). All spurs tied to wires; laterals cut clean out; bunches supported.
29.	85	72	Sweet-waters discovered to be changing color for ripening.

1834.	Maxim. by day.	Minim. at night.	
April 12.	83	72	First berry of the Hamburgh beginning to change color. Moisture withdrawn; plenty of air admitted; border watered with dung water (dry weather).
18.	-	-	About half of the berries of the Hamburgh reddened; about one third of those of the Sweet-water perfectly ripe; the berries generally, each 3¼ in. round.
22.	-	-	All watering of the soil for the vine roots, and sprinkling of the house to prevent dust, &c., performed when plenty of air is given, that *shanking* (shrivelling) may not be induced in the berries. The border watered with dung water. Fruit swelling rapidly.
24.	-	-	Cut fruit of the Sweet-water.
May 1.	-	-	Three days past have been cloudy and rainy. To color the fruit of the Hamburgh, we keep firing to 77° by day (with front air, if rainy), and 72° by night; allowing ingress to a little air all night, the laps of glass being puttied.
6.	-	-	The fruit of the Hamburgh in high perfection; many of the berries each 3½ in., and in some few 4 in. round.
7.	-	-	The fruit of the St. Peter's changing color: a few berries in a bunch a little brown.
10.	81	70	Grapes exhibited at the gardens of the London Horticultural Society, for which the large gold medal was awarded.
	-	-	A little air left all night, when thermometer stands above 50° out of doors; otherwise shut from ten till four.
16.			The soil well watered, to prevent the leaves decaying, and consequently unnatural hardening of the wood, which ought to be ripened in a deliberate manner, aided by the shade and surface of the leaves, according to the order of nature.
			The leaves are now of amazing size, green and vigorous, measuring, independently of the footstalk, 18½ in. by 15 in.; and this not in a solitary instance.
30.	-	-	Soil inside the house, and border outside, watered.
June. 7.	-	-	Grapes again exhibited at the gardens of the London Horticultural Society, along with six pines. Both were accounted the best production exhibited, and prizes were awarded as such.
9.	80	-	Ceased to make fires. With a supply of air left as above, the temperature stands usually above 65°.
20.	-	-	The fruit of the Hamburgh fine; that of the St. Peter's ripe; the leaves still green and vigorous. All possible air admitted by day, when fine. Protected from rain for the sake of the fruit only. Shut up close from dusk till dawn.
July 1.	-	-	Fruit all cut. Left open with lights on.
10.	-	-	Lights off.
			The lights being off, no culture of any kind is given, except occasional waterings in very dry weather, to prevent a sudden and unnatural termination of the processes which actuate growth.

Art. 7. *Is on the Culture of Persian Melons.*

Art. 8. *On Protecting and Preserving Fruit Trees.*

Art. 9. *On the Cultivation of the Mushroom.*

The December number is chiefly filled with notices of the various Amateur, Botanical, Floricultural and Horticultural Societies throughout England, Scotland and Ireland.

Art. II. *First annual Report of the Proceedings of the Rensselaer Agricultural Society, being for the Year* 1834. *Also, the Address of S. Blydenburgh, Esq. Delivered at the first annual Meeting.* Pamphlet 8vo. 16 pp. New York, 1835.

This report contains an account of the organization of the Rensselaer Agricultural Society; the constitution adopted by the members; the address of a committee, appointed for the purpose, to the farmers in the said county, and the address of S. Blydenburgh, Esq. at the annual meeting, October 17th, 1834.

The first meeting, for the formation of the society, was held on the 14th of January, 1834, at Troy, and committees appointed to nominate the officers, obtain members, and draft a constitution. The committee reported one similar to those of other Agricultural Societies. The address to the farmers of Rensselaer county is replete with sound sense and excellent advice, and will be productive of great benefit to every farmer, desirous of improving his lands or his stock. The usefulness of Agricultural Societies is distinctly stated, and the importance that the farmer should frequently "meet with his companions in toil, who have had experience and who have grown gray in the study of the best means to make the earth yield her treasures to the support of man," is especially urged. "Such meetings," say the committee, "will teach, and such suggestions '*tell*,' of the produce of your farms, and the cash in your pockets."

The address by Mr. Blydenburgh is full of information to the farmer, and cannot but prove highly interesting to every individual who duly estimates the importance which agriculture will have upon the future happy condition and prosperity of our country. We have not room to make many extracts, but we cannot refrain from giving our readers a few paragraphs, which have struck us as exceedingly appropriate to the present state of farming.

Mr. Blydenburgh commences with a few remarks upon the practice, in European and other countries, of the produce of the earth's cultivation being monopolized by the haughty owner or landholder, and proceeds as follows:—

"But, thank Heaven and the invincible spirit of our fathers! we inherit a land where no such abhorrent state of things exists; but where every one is born to inherit and to feel the dignity of human nature. Here, the honest farmer, as he wipes the sweat from his sunburnt brow, instead of cringing and humbling before the insolent lord of the manor, fears no intermediate being between himself and the God who made him. The fruits of his labor are all his own—he has no dread of the rapacity of an unfeeling tax-gatherer—no privileged clergy to demand the tenth of all his hard earnings. If he labors to fertilize his grounds, to beautify his dwelling, or to enrich and embellish it with fruits and flowers of every kind, he does it for the benefit of himself and his posterity."

The improvement of agriculture, Mr. Blydenburgh thinks, likely to be retarded by early prejudices in education, "especially when confirmed by habit, and still more so when that habit is strengthened by custom all around us, that not only in this country, but in every other, and as well among all other classes as agriculturists, in spite of the most brilliant examples set by a few enterprising individuals, to entice them on the road to improvement, mankind will still prefer to continue, age after age, in the footsteps of their fathers. There are even some who are professed enemies to every improvement, and who not only ridicule, but utterly condemn as a dangerous innovation, the slightest deviation from that precise track which has been trodden "*since time whereof the memory of man runneth not to the contrary*"—as it is beautifully described by Cowper:

'Such dupes are men to custom, and so prone
To reverence what is ancient and can plead
A course of long observance for its use,
That even *slavery*, though worst of ills,
Because transmitted down from sire to son,
Is kept and guarded as a sacred thing.'

To such people, to exhibit examples and state facts is time thrown away.

Mr. Blydenburgh, in complimenting the exertions of several of our most distinguished cultivators, speaks thus:—

"But the clouds of superstition and prejudice, which have rendered our night of ignorance still more gloomy, are fast breaking away, and bright constellations are ushering in the perfect day of improvement. A Buel, a Colman, and many others, may be considered, not only as stars adorning our yet benighted hemisphere, but as harbingers of the glorious morning of science which is soon to follow."

The very prevalent idea with many farmers, that books are not necessary to the improvement and practice of agriculture, and the importance of agricultural schools, are thus alluded to:—

"But let me entreat the friends of agricultural improvement still to persevere, notwithstanding all these discouraging circumstances. Let the disciples of the old school ridicule *book* farming, and laugh at the idea of an agricultural college, or of schools to teach the farmer how to hoe his corn. As I have already stated, the spirit of improvement is awake! Our State legislature already has the subject before it, and the Agricultural Society of the State will doubtless pursue it with persevering attention. It is true, we cannot have the credit of setting the example and leading the way. Such institutions are already established, and are producing most happy results in several parts of Europe; and young men are attending them even from this country. Let us then have the praise of setting the example in our own country, and let this State take the lead of all the others. Where is the man of so much apathy as not to be cheered by the anticipation of beholding such an institution: an extensive and handsome edifice, where our young men shall be taught, in theory and in practice, those immutable principles of nature which form the only infallible guide to all the substantial comforts of life? Where, by mingling the useful with the sweet, they will become inured to habits of industry: where science and art shall combine to inspire them with laudable emulation to excel each other! If we are charmed with viewing a garden, upon a small scale, the work perhaps of a single, but skilful individual, how infinitely more charming must be the view of three or four hundred acres, planned and laid out with all the accumulated skill of ages, aided by all the lights which science has thrown on the subject, with all the beauties of the vegetable world, and all that is useful of the animal! Could any earthly prospect be more delightful? I answer, yes; that of two hundred young men, vieing with each other in skill and industry, not only in improving and beautifying the establishment, but in improving their minds by study, and their bodies by manly labor, infinitely more pleasing and more to their credit than the mountebank feats of a gymnasium; thus fitting themselves as brilliant lights to guide, instruct, and adorn the succeeding generation."

The remainder of the address relates to the fencing of farms, manuring of land, &c.

ART. III. *Literary Notices.*

The Arboretum Britannicum, or the hardy Trees of Britain, native and foreign, Pictorially and Botanically Illustrated, and Scientifically and Popularly Described; with their History, Culture, Uses, and Effects in Landscape Scenery. Conducted by J. C. LOUDON, F. L. S. H. S., &c., was to appear in London, on January 1st. 1835. To be be published in monthly 8vo. numbers. Price 2s. 6d. each.

Chaptal's Agricultural Chemistry, translated from the last French Edition, will be published in a few days, by HILLIARD, GRAY, & Co. and HOVEY & Co. One volume 12mo.

MISCELLANEOUS INTELLIGENCE.

ART. I. *General Notices.*

Mórus multicaúlis. It appears from the deliberations of the French Royal Society of Agriculture, which we find noted in the Farmer's Register, that the Chinese mulberry is not a distinct species; that its seed will not produce its like, and as a valuable variety, cannot be preserved except by multiplying it by cuttings, grafts, or layers; and that it is exclusively by these means the Chinese cultivators have reared this tree from time immemorial. Seeds sown near Venice have produced varieties, but none like the true Morus multicaulis.—*Cultivator.*

Art. II. *Foreign Notices.*

ENGLAND.

Growing Plants in Moss. Your correspondent, Mr. Thomas Parkins, informs us that he uses moss as a draining for plants in pots, and appears to think the practice new. I beg leave to say that I used the same thing, for the same purpose, as long ago as the spring of 1824; and found it to answer, in every respect, better than the common way of draining pots. Since that time, I have struck pelargoniums in moss; and have grown them in it without any mould at all, and found the plants stronger and better than such as were grown in the regular compost for pelargoniums. As the moss decays at the bottoms of the pots, I press it down, and fill up the pots with fresh moss. It does not signify whether the moss be live or dry, as both will answer equally well.—*John Stewart, Gardener to Alexander Baring, Esq., Addiscombe Place, Croydon, Surrey, Aug.* 20, 1834.—*Gard. Mag.*

Effects of the prolonged Summer. A second crop of whortleberries (*Vaccinium* Myrtillus) has ripened at Edgworth Moor in Lancashire. Fine ripe figs were grown in the open air against a wall in Aberdeen. Pear trees, in the gardens of Sir T. G. Cullum at Hardwicke House, in Suffolk, have produced fruit on the young spring shoots of the present year, which flowered at Michaelmas: the pears are of the Passe-Colmar and Marie Louise kinds. A fig tree on the same property has its second crop perfectly ripe. At Elmswell, in the same county, one tree, which has already produced two crops of apples, is in bloom for the third. In York, white currants, fully ripe, were gathered in a garden opposite the Pavement; and at Scarborough Parade, large strawberries have fully ripened, notwithstanding the exposure of the situation to the sea breeze. The gardens and fields near Sheffield present all the appearance of spring; flowers and plants having blown and borne fruit a second time. The Inverness woods have yet scarcely lost a leaf; and are only here and there beginning to assume their autumnal livery. A pear tree in a garden near Huddersfield, which had lost nearly all its leaves, has budded forth again in freshness and full blossom. At Coleridge, in Devonshire, the apple trees have ripe fruit and full flower blossoms at the same time. (*Morn. Chron.* Oct. 17, 1834.) About London the weather was so fine during the last fortnight of September and the first fortnight of October, that the six and sometimes eight artists whom we had employed, during the whole of that period, in the Horticultural Society's garden, Messrs. Loddiges' arboretum, and in various nurseries, making drawings of trees and shrubs for our *Arboretum Britannicum*, did not meet with a single day's interruption till the 15th of October, when portraits of all the deciduous trees and shrubs were completed. The evergreens will probably occupy them a month or two longer, as the weather can hardly be expected to continue such as to allow of drawing every day in the open air.—*Gard. Mag.*

Restoration of the old name Dahlia. At the exhibition of the Beverley Floral and Horticultural Society, H. Reynard, Esq., the president, made some observations on the georgina, which, he said, ought to be still called dahlia. "The genus was named Dáhl*ia* in honor of Professor Dahl, a Swedish botanist. Some objections were at first made to this name, under an erroneous impression that it had already been appropriated to another genus; and a further objection was taken to it from the similarity of its sound to Dàl*ea*, a genus of leguminous plants, so named after our countryman, Dr. Dale. The first of these objections induced Professor Willdenow, in his *Species Plantarum*, to apply to these plants a new name; that of Georgìna, after Georgi, an eminent Russian traveller and botanist. In this he was followed by M. Decandolle: but the original name seems to be fully established; and is retained in the new edition of the *Hortus Kewensis*, as well as by the botanists [gardeners] of France." It is certainly much to be regretted that a plant in such general cultivation as that alluded to should pass under two different names; but there is no other mode of avoiding cases of this kind than by adhering to the principles and rules laid down by botanists. The objections made to the name Dáhlia were made under a supposed discovery of the fact, that the name Georgina had been previously applied to the same family of plants: see VII. 716.; and because the laws of botanical nomenclature enjoin the employment of any name first applied, to the exclusion of all others, except where new genera are formed out of old ones. Our authority for adopting the name Georgìna was Mr. Sweet; but, since the above was in type, Mr. David Don has proved to us that the name Dáhlia was applied one year before that of Georgìna, and that, therefore, although the latter name has been adopted in the *Dictionnaire d'Histoire Naturelle*, the former ought to be retained. The name Dáhlia, therefore, shall in future be used by us, instead of that of Georgìna; and we thank Mr. Reynard for leading us to re-examine the subject.—*Gard. Mag.*

[We have adopted the name Georgina ourselves, and were in hopes that the name would have been retained; though from the tardiness with which some of the botanists accepted of it, we were in doubt if it became established. It seems now settled, as above stated, that the old name Dahlia must take precedence, especially when so able a botanist has looked into the subject, and satisfactorily ascertained its correctness. From the variety of English periodicals which we have lately received, we have made up the following list of such Dahlias as have received the greatest number of prizes at the various Floricultural and Horticultural meetings. We are glad to perceive that many of the varieties which rank among those superior, and with true Dahlia properties, are the same as have been exhibited at the Massachusetts Horticultural Society's room the past season. The Queen of the Whites among the whites, and Countess of Liverpool among the scarlets, were exhibited by several amateurs. Lord Liverpool, the finest purple, and which will be seen has carried off the most prizes in its class, we flowered last season to great perfection. Many of the varieties below, which rank first in their class, are in several collections in this vicinity, and will probably flower the coming summer.—*Conds.*]

White.—Queen of the Whites 27 prizes: *Blush.*—Blush Lilac 11 do.: *Edged.*—Queen of Dahlias 24 do.: *Spotted.*—Priestley's Enchantress 12 do.: *Lilac.*—Royal Lilac 12 do.: *Rose.*—Widnall's Perfection 25 do.: *Shaded.*—Belladonna 11 do.: *Buff.*—Maid of St. Leonard 10 do.: *Striped.*—Levick's Commander in Chief 15 do.: *Yellow.*—Widnall's Jason 16 do.: *Orange.*—Widnall's Prince of Orange 20 do.: *Ruby.*—Beauty of Camden 9 do.: *Purple.*—Lord Liverpool 15 do.: *Scarlet.*—Countess of Liverpool 21 do.: *Crimson.*—Springfield Rival 15 do.: *Dark.*—Lord Derby 11 do. The following varieties, several of which we have seen, have also gained first prizes:—Levick's Incomparable, Brewer's Fairy Queen, Picta formosissima, Linn's fine Stripe, Squibb's pure Yellow, Widnall's Aurora, Dennisii, Plant's Purpurea Perfecta, Lass of Richmond Hill, Prince George of Cumberland, Lady Fitzharris, Cicero, Hall's Mogul, Brewer's Paragon of Perfection.

Fanny Kemble Tulip. In the Floricultural Cabinet, an excellent little work, devoted exclusively to the cultivation of flowers, we find the following account and description (taken from Mr. Hogg's supplementary treatise) of the above Tulip, accompanied with a painting of the same.

"Among the new Tulips raised from seed by our own florists, which have been recently broken into color, there are a few, beyond all doubt, of sterling merit, and worthy of every encomium; but I consider it the extreme of folly to endeavor to create and inspire a longing for any flower, which, in all probability, will not be gratified for five or six years to come; therefore, every florist must not expect to find in me a willing herald, ready to sound the praises of any such new flower. A really good flower wants no blazonry; it best bespeaks its own praise, and the fame of it soon gets abroad;

if this fail, let those immediately interested undertake the office at the time they have any bulbs to dispose of. Yet out of respect for the well-known veteran florist, Mr. Davey, of Chelsea, now in his seventy-fifth year, and in whose breast the fancy for Tulips is as predominant as ever, who gave last autumn one hundred sovereigns to the executors of the late Mr. Clark, to entitle him to the possession of that loveliest of all Tulips, 'Miss Fanny Kemble,' I feel bound to attempt a short description of this flower, which was the pride and boast of its late owner, and which excited the envy and admiration of all the amateurs who went to view it. This 'precious gem,' a Byblomen Tulip, was raised from one of Mr. Clark's seedling breeders, and broke into color three years ago; it has produced two offsets since, and is adapted to the second or third row in the bed; the stem is firm and elastic; the foliage full and broad, of a lively green; the cup large, and of the finest form; the white pure, and wholly free from stain; the pencilling, on the petals, is beautifully marked with black or dark purple, and the feathering uniform and elegant; it preserves its shape to the last, the outer leaves not sinking from the inner; in a word, it is considered the first flower of its class, and the best that has ever been produced in England; being now in the possession of Mr. Davey, it may be viewed when in bloom at his garden, in the King's Road, Chelsea."

[At the sale of Mr. Thomas Davey's effects, about a year since, it was purchased, having two offsets, by John Goldham, Esq. of Pentonville, London, for £72 10s. (about $322.)—*Conds.*]

Camèllia japónica var. Fórdii. This is a variety between Lady Hume's Blush and the myrtle-leaved. We have just (Oct. 26), seen a plant sent to London for exhibition, by Messrs. Lucombe, Pince, and Co., and consider it very beautiful, and very distinct. We understand from Mr. Townsend, the foreman of the plant department in the Lucombe Nursery, who has shown the specimens to many of the amateurs about London, that it is universally admired.—*Gard. Mag.*

Splendid Dahlia Exhibitions.—Cambridgeshire Horticultural Society. The grand show and dinner attracted a very numerous company; to whom the beauty and excellence of the articles exhibited, and the elegant decorations of the room, seemed to give general satisfaction. The decorations "comprised a collection of lofty arches, arranged as a hexagon around a pillar, on the top of which was placed a splendid fuchsia. From a point on the sides of the hexagon sprang three triumphal arches, occupying the remainder of the tables. The shaft of each arch was surmounted by a Corinthian capital formed of georginas, the colors of which were elegantly varied. The framework of the whole was tastefully decorated with laurels and georginas intermixed. Not less than six or eight thousand blooms were employed in the ornamental parts of this exquisitely beautiful show.

Hereford Horticultural Society. On the centre of the large stage appeared a representation of a single striped georgina, composed of nearly 300 georgina blossoms, yellow and dark red; it was 6 ft. across, and had a splendid effect. The top petal supported a floral crown formed of georgina, hollyhock, and convolvulus wreaths, the georgina being styled "King of Flowers." At the foot of his majesty's throne were two cornucopiæ, pouring out the choice treasures of Flora and Pomona.

Warwickshire Floral and Horticultural Society. The exhibition of georginas was very splendid; Mr. Bourne of Ashted sent a beautiful collection, but it was too late for exhibition. J. Woolley, Esq., Mr. Rushton, and Mr. Cowdry, were among the successful competitors. The unwearied friend of the Society, Mr. Kendall, exhibited a design which formed the segment of a circle, with its base line, on which was inscribed "Warwickshire Floral Society," all in georginas; the whole being surmounted by a crown and W. R. More than 1000 blooms were used for this design, which were placed on the front of the orchestra, and nearly occupied the whole width, adding much to the beauty of the arrangements.—*Gard. Mag.*

[It will be long, unless our Dahlias bloom more profusely than they have for the last two years, before our exhibitions will present such a display of this "King of Flowers."—*Conds.*]

ART. III. *Queries, Criticisms, &c.*

GENTLEMEN,

IN the last number of your valuable Magazine (No. 2, for February), at page 64, and in a Review of the "Horticultural Register and Gardener's Magazine," for January, 1835, I observe a notice of an article "On the Grape Vine," in which, in the parenthesis, which includes your Review, you have a remark as follows:—"But the substance of the communication has been published in the New England Farmer—translated from a French work by the Hon. John Lowell—vol. vi. pp. 73, 118, and by Mr. Kenrick, in his useful work, the New American Orchardist." Although there appears to be some little ambiguity in the mode of expression, yet the more obvious meaning would appear to be, that the substance of this article had been twice before published:—1st, by the Hon. John Lowell, in the New England Farmer, as before stated; and 2d, in the New American Orchardist.

With respect to original matter, a little reflection will serve to convince us, that some of those new and improved modes of practice or inventions, which may have already been successfully adopted by other nations, and in other countries, deserve a prior claim to any new or untried invention or communication, however original. And all important inventions or improvements, whether physical or moral, which require time and perseverance, and expense in their application to the test,—and all that is new, being regarded as innovation, and having to contend with all that is ancient and long-established, they require to be presented often to the public view, and in every new shape and original form, until they are enabled to surmount every obstacle which the ingenuity of men is so prone to devise, and until their final and successful adoption in practice.

The communications of Mr. Lowell, to which you have referred, are confined exclusively to *two systems*, or modes of managing the vine. 1st, the system as practised at Thomery, a village in the forest of Fontainbleau, near Paris. And 2d, as connected with the first.—On the system of close planting, and short pruning. I might have spoken of the system practised at Thomery, as serving to illustrate laws of nature, which are alike applicable to other trees and plants, and other systems too; this being the combined system of other most perfect systems, whose principles may all here be found, disclosed. The first introduction of this system to the notice of the American public, is justly due to Mr. Lowell, [which we stated.—*Conds.*] His account, which was inserted in the volume and pages of the New England Farmer above referred to, was a translation by him from the Bon Jardinier, for 1827, a work of 1000 pages, edited M. M. Poiteau and Vilmorin, which has been published annually, at Paris, for 70 years. In that work this system, and this system alone, is described by the respectable editors, this being considered by them, as the combined essence of all and of every perfect system. This system has since been introduced to notice in England, with more important particulars, by Mr. Robertson; and his account in the London Hort. Trans., is from the *Bon Jardinier*, and the *Pomone Française* of the Comte Lelieur, and from other sources. My account in the New American Orchardist, to which you have referred, is from all these sources combined, which were accessible, and had come to hand; to all whom, individually and by name, full credit has been there assigned. Yours, WILLIAM KENRICK.

Newton, February 10th, 1835.

Art. IV. *Quincy Market.*

Roots, Tubers, &c.	From $ cts.	To $ cts.
Potatoes:		
Common, per barrel,	1 00	1 87½
Common, per bushel,	40	50
Chenangoes, per barrel,	1 25	1 50
Chenangoes, per bushel,	50	60
Eastport, per barrel,	1 75	2 00
Eastport, per bushel,	75	1 00
Nova Scotia, per barrel,	1 25	1 50
Nova Scotia, per bushel,	40	50
Turnips:		
Common, per barrel,	75	1 00
Common, per bushel (washed)	40	50
French, per bushel,	50	
Onions, per barrel,	1 75	2 00
Onions, per bushel,	75	1 00
Onions, per bunch,	4	6
Beets, per bushel,	70	80
Parsnips, per bushel,	70	80
Carrots, per bushel,	40	50
Salsify, per dozen,	25	37
Radishes, per bunch,	12½	25
Horseradish, per pound,	10	12
Garlic, per pound,	15	20
Cabbages, Salads, &c.		
Cabbages, per dozen heads:		
Red,	75	80
Savoy,	50	75
Drumhead,	75	1 00
Brocoli, per head:	25	
White,	25	50
Purple,	20	25
Cauliflower, per head,	37	50
Celery, per root,	10	25
Lettuce, per head,	6	12
Spinach, per peck,	33	37

Squashes and Pumpkins.	From $ cts.	To $ cts.
Canada, per cwt.	none.	
Common crook-neck,	3 00	4 00
Lima,	3 00	4 00
Pumpkins, each,	25	30
Pot and Sweet Herbs.		
Parsley, per half peck	50	
Sage, per lb	20	30
Marjoram,	50	
Savory,	25	37
Spearmint,	80	
Fruits.		
Apples:		
Baldwins, per barrel,	3 00	4 00
Baldwins, per bushel,	1 50	
Pearmains, per barrel,	3 50	4 00
Pearmains, per bushel,	1 50	2 00
Russetts, per barrel,	3 00	3 50
Russetts, per bushel,	1 50	1 75
N. Y. Pippins, per barrel,	3 25	3 75
Pears:		
Iron white, for baking,		
per barrel,	5 00	
per bushel,	2 00	2 25
Sweet baking, per bushel,	none.	
Old St. Germain, per dozen,	none.	
Quinces, per bushel,	"	
Cranberries, per barrel,	7 00	7 50
Cranberries, per bushel,	2 50	3 00
Grapes, foreign, per pound,	37	
Pine Apples, each,	25	50
Oranges, per hundred,	1 00	1 50
Lemons, per hundred,	75	1 00
Chestnuts, per bushel,	3 50	4 00
Walnuts, per barrel,	4 00	4 50
Walnuts, per bushel,	1 75	2 00
Almonds, per pound,	13	15
Filberts, per pound,	6	8
Castana, per pound,	4	6

Remarks. The market continues to be well supplied with its various articles, considering the prevalence of the cold weather. A slight increase in prices on most of the market productions, will naturally take place as the season advances, and the winter stores become exhausted. Good Potatoes remain scarce and nearly the same as in our last. Common kinds are tolerably plenty; prime Eastport are much wanted, and command a slight advance from our last; there are many stored about in different places, but they have mostly been frozen. Turnips are sufficiently plenty. Onions are in great demand and very few to be had; the prices have advanced considerably, as will be seen by our quotations. This was not expected from the great supplies in the fall, and the very depressed rates at which they sold. Beets, Parsnips, &c. are plenty. Radishes come to hand more abundantly and of finer quality. Cabbages are not so plenty as they have been; and fine Drumheads command high prices. Broccoli and Cauliflowers are much sought after, but there are very few to be had, especially those of fine quality. Celery has advanced a shade; much of that stored for spring use has been frozen, and consequently injured in flavor. Lettuce now comes in much more plentifully, and prices have decreased. Squashes continue in great demand, and the winter supplies having become nearly exhausted, prices have advanced; none of the true Canada are to be found in the market. Pot and Sweet Herbs are not generally in great demand; Parsley, however, is much sought after. Apples are scarce and much wanted, particularly for shipping, and prices have continued to increase since our last. Very few Pears of any kind are to be found in the market. A few of the old Iron Pears for baking, command the prices in our quotations. Cranberries are scarce and high. Foreign Grapes are all out of the market. Lemons are plenty and sell at low prices. Chestnuts have advanced a shade. Walnuts are more abundant. M. T.

Boston, Feb. 20th, 1835.

Art. V. *Massachusetts Horticultural Society.*

Saturday, January 31*st.—Exhibited.*—From John Heard, Esq., specimens of an Apple supposed to be a native variety; the scions were taken from a tree growing in Ipswich, which produced fruit more than sixty years since. Mr. Heard has named it the Ipswich apple. Size large, skin fine red and yellow, striped with a still darker red. Flesh very tender, juicy and rich;—an excellent fruit. Cork Russet apples from Mr. Micah H. Ruggles, of Fall River; the same variety was exhibited the 17th, and mentioned in our report (p. 78.) Mr. Ruggles stated that they had been touched by frost, and could not be considered as fair specimens.

February 14*th.—Exhibited.*—A bouquet of flowers from Messrs. Winship—consisting of Geraniums, Roses, Schizánthus, Hoitzia, Alónsoa incisifòlia, Calendùla hybrida, Erica, Diósma, &c. &c.

Art. VI. *Meteorological Notices.*

FOR JANUARY.

Thermometer.—Mean temperature 22° 11. Highest 51°—Lowest 14° below Zero.

Winds.—N. seven days—E. two—S. E. one—S. three—S. W. six—W. five—N. W. seven.

Character of the Weather. Fine sixteen days—Fair six days—Cloudy nine days.

MONTHLY CALENDAR

OF

HORTICULTURE AND FLORICULTURE,

FOR MARCH.

FRUIT DEPARTMENT.

Grape vines in green-houses and graperies will begin early in the month, to swell their buds; plenty of air should be given to prevent their being forced out prematurely, as it would tend to weaken the fruit bearing shoots.

If the vines have long shoots, and appear not to break well, bend the tops lengthwise of the house, to prevent the full flow of sap. When they show fruit they should be tied up to the trellis with strong bass matting. Grape vines in pots should be treated similarly to those on the rafters; care should be taken that they have plenty of water, and as they show fruit, occasionally liquid manure. Grape eyes put in the first of the last month in the hot-bed, will by this time, if properly treated, have made shoots two or three inches high: the heat of the mould in the bed should be kept up to 75°. Eyes put in the first of this month, will make wood sufficiently strong to bear next year.

FLOWER DEPARTMENT.

Ten-week stocks. Continue to sow the seed to bloom early in a moderate hot-bed, in the flower borders.

Tender Annuals of all kinds should be sown this month in pots, in light rich soil, and placed in the hot-bed.

Dàhlias should now be plunged in the hot-bed, to forward them; separate the roots as soon as the eyes are discernible, and plant them in small pots in the green-house. Seeds now sown, the plants will come into flower in August.

Camèllias may be inarched the latter part of this month.

Rose cuttings of all the tender kinds now put in, will grow much more freely than at almost any other season; fill the pots half full of old broken pots-herds, and the remaining half with fine sand; place in the cuttings, letting the bottom of them touch the broken pieces of pots.

Calceolarias in small pots, should be shifted into a larger size.

Polyánthus, Auricula, and *Ranúnculus* seeds should now be planted.

Ranúnculus roots should be planted in beds, if prepared; later will be injurious to their blooming well.

Tigrìdia pavònia. The bulbs and seeds of this splendid plant should be planted in the hot-bed; the former in small pots, the latter in rather large pots, filled with light sandy soil.

VEGETABLE DEPARTMENT.

Cucumber beds. Where beds were made for forcing cucumbers the latter part of January or the first of February, and the seeds sown, the plants will now be ready to be hilled out. Raise the mould under the centre of each light to within about six inches of the glass, and turn the plants out of the pots into the middle of the hill; earth up to within *half an inch* of the seed leaves, and give the plants a gentle watering, with water warmed to the temperature of the bed. This should be done in the afternoon, selecting a cloudy day for the operation: if the sun shines very warm the day or two following, a bass mat should be thrown over the frame from ten until two o'clock. As the plants progress in growth, more soil should be added to the hills, of the same kind as that which they were made of. Give air and water as the weather will permit.

Broccoli and *Cauliflower* seeds should be sown when wanted for early use.

Celery seed should be sown for a summer crop.

Tomato and *Egg Plant* seeds should be planted. The latter will not perfect its fruit unless the seed is sown this month.

THE
AMERICAN
GARDENER'S MAGAZINE.
APRIL, 1835.

ORIGINAL COMMUNICATIONS.

Art. I. *On the Professional Education of Gardeners.* By Grant Thorburn, Esq., New York.

By education is generally understood that portion of knowledge which is obtained at schools; but we shall here use the term in a somewhat more extended sense, and consider it as the means which may be employed, to render men competent for performing the part which they undertake to perform in life, with increased satisfaction to themselves, and to their employers. Education may thus be considered, as extending to every thing which operates on the body or mind, from the earliest period of our existence, to the final extinction of life. With this object in view, we shall consider, in succession, the professional, intellectual, religious, physical, and economical education of gardeners,—previously submitting some general remarks.

The knowledge of languages, history, geography, arts, sciences, and literature, which a gardener, daily occupied with his profession, may acquire, provided he begins at the commencement of his apprenticeship, and continues to employ his leisure hours in reading, till he is twenty-one, or twenty-six years of age, is, by no means inconsiderable; not that he can or needs to become learned; but, if desirous, he may become generally intelligent, render himself fit, as far as conversation is concerned, for good society; prove instructive and entertaining to others by his conversation, and provide a reserve fund of enjoyment for himself, by laying up a store of ideas for reflection in misfortune, disease, or old age.

The grand drawback to every kind of improvement is the common and degrading idea, that certain things are beyond our reach; whereas, every thing is attainable by the employment of means, and nothing, not even the knowledge of a common laborer, without it. There are many things which it is not desirable to wish for, and which are only desired by men of extraordinary minds; but let no man fancy that any thing is impossible for him. I speak from *experience;* I commenced a seed-store with *fifteen dollars;* finding it thrive, I resolved it should be the *first.* And now I think it is, for while in Britain, last winter, I saw nothing to equal it. I say again, let no man think that any thing is impossible, for this is the *bane* of all improvement. Let no young gardener, therefore, who reads this, even if he can but *barely read,* imagine that he may not become eminent in any of the pursuits of life, or departments of knowledge; much less in that of his own profession. Let him never lose sight of this principle—*that to desire and apply is to obtain;* and that the attainment will be in proportion to the application.

It may be, my dear sirs, that I am partial to my own countrymen: but I do think that the Scotch are the most intelligent and persevering gardeners in the world. This proceeds from their thirst after knowledge; they are anxious to be proficients in their calling;—hence when their work is done, instead of going to the pot-house, as is too often the practice with many gardeners, you will find them with the midnight lamp, poring over Curtis's Botany, or Loudon's Gardener's Magazine. Their motto is—*second to none.* Let every gardener's apprentice go and do likewise; it is only when young that this habit can be formed. How great is the satisfaction of the gardener, and how great is the pleasure of his employer, when he walks for amusement in his garden, to find that his man can talk like a proficient in his science, and converse like a gentleman on general topics. I knew a gardener in Scotland, whose fortune was laid, in consequence of an hour's conversation with his noble employer.

Yours, GRANT THORBURN.

Hallett's Cove, Long Island, February 17th, 1835.

(To be Continued.)

ART. II. *On the Physiology of the Vine; with Hints on a new Method of forming a Vine Border.* By FRANCIS HAY, Esq.

GENTLEMEN,

HAVING tasted the pleasure to be derived from horticultural pursuits, and realized its advantages, I am desirous of promoting a more lively interest in your useful Magazine; socializing in its influence, and instructive in its tendency, correcting our former or present errors, and opening a broad field for usefulness, improvement and pleasure.

It will be my object, in this article, to excite more attention to Vegetable Physiology. This science teaches, in the first place, the necessity of providing a neat and comfortable department for the root, whether in the flower bed, the grapery, or the flower pot. Nature's means of neatness are, washing with rain water; if plants that derive their aliment from the earth, cannot enjoy this act of kindness, they are sickly and unfruitful. If we would enjoy the friendship of plants, whether exotic or indigenous, we must know their history, habitudes and wants, and treat them accordingly.

The vine being my present subject of remark, will now be considered. The physiology of the vine, as well as other plants, shows that a striking analogy exists, between the vegetable and animal world. Alimentation is performed both at the root of the vine, and above the surface of the ground; it has its sexual organs, arteries and veins, absorbing and perspiring pores, above, and below the earth; it has joints, if not muscles; it labors with its leaves to catch all the direct rays of light, which is one of the most powerful agents in elaborating its fluids; the tendrils are its hands to support itself; it partakes largely of vegetable instinct; the leaves have something answering to eyes; and while they are looking for the light, the tendrils are feeling for the trellis; as soon as they touch the trellis wire they commence winding around it; the fluids imbibed by the roots pass up the main canals to the extremities of the leaves and claspers, and while it remains in the transparent parts, the light performs its office; as it returns to the root it deposits the albumen. The fluids move up by expansion from heat, and capillary attraction. If this delineation of the vine be not satisfactory, I am able to produce the high authority of Burgamans and De Candolle, who have, by many experiments, accounted for the necessity of a rotation of crops, now practised by most of our agriculturalists. (See the American Journal of Science and Art, by James Silliman, M. D., L. L. D., Vol. xxiii. page 138.)

The radical habits of indigenous vines of this country, differ materially from exotics; the roots of the former keep near the surface of the earth; the latter, from necessity, striking deep for moisture, in a dry, hot soil. My soil is cold, adhesive and clayey, without good natural means of draining; the consequence to foreign vines is, they are weakly, and the fruit imperfect. However, neither national considerations or cost, have been able to overcome my preference to the more splendid appearance and superior delicacy of the foreign grape, in comparison of which, all our domestic kinds, as desserts, are very inferior; but for wine, I agree with Mr. Kenrick, whose remarks I consider invaluable; I hope this gentleman will contribute to your pages often. The best situation a vine can have, is upon a gentle slope to the south, the roots running south, and the top north, on an inclined plane or roof, and raised twelve or fourteen inches, by a trellis above the roof. I have an Isabella vine, about four years old, running on a roof, which produced, last year, three bushels of grapes, and all well matured; the roots running south-west and the top north-east; my cellar drains the roots well.

I purpose the ensuing spring, to take the border of my vinery off, to the depth of two feet, leaving an inclined plane descending from the vinery,—to lay a drain from the lower side of it, and pave the bottom of the border with bricks; then to lay a continuous flue in a serpentine form; then to cover this flue with one thickness of brick, the joints of the covering to be filled with lime mortar; next, to cover the bricks with four inches of sand, to drain the border; then to fill up the border with a compost of manure, well decomposed, or rotten, with soil and sand thoroughly mixed: this is what I call a comfortable bed for the roots to lodge in; the lower end of the flue to be opened when the temperature is high in the forenoon, and likewise the upper end, to which a funnel is to be attached; the funnel being made of copper or lead, will be a good conductor of heat, and rising three or four feet above the surface of the border, will, when the sun strikes it, force a brisk circulation of air; the same principle applies to this funnel as to the vine stem before mentioned.

The greatest objection to this mode of warming and draining the border, is its tendency to dry the bed too much; but I am more afraid of too much humidity than dryness. But why all this preparation about neatness, washing, and draining the roots? De Candolle has proved that plants will absorb any soluble matter, even their own excrements—which is very baneful to them, but which is of advantage to other plants—by many experiments. Here the analogy between animals and vegetables holds good. We cannot violate the laws of nature with impunity; all we have to do is, to study her economy, and imitate by art her provisions, where they are deficient.

For years past, I have made observations on vines in this vicinity in open culture, and have found those vines only that were fruitful year after year, to have grown on silicious or gravelly sub-strata, or an assemblage of small stones beneath the surface of the earth, that were pervious to air and water.

Having thus far considered the radical circumstances of the vine, it remains to say but little upon the external parts in relation to the agency of light and air; all those branches that have their leaves much shaded, will be deficient in the vital principle, and of course weakly and unprofitable. There is one difficulty in carrying a vine upon a high roof; it is liable to be broken by the wind where there is nothing to break it off. I shall be under the necessity of putting up a break-wind or turret, to defend the vine that runs on my roof.

I consider it unsafe to prune the Isabella vine in the fall of the year; if the vessels are thus left open, and it be a hard winter, the vine suffers very materially. My course is, to wait until the vine has put out its shoots four inches, in the spring, and then to take off branches or shoots, as space or the strength of the vine requires.

Nature's mode of feeding the roots of her vegetable offspring, is by her own deciduous foliage, from the surface of the ground, where she prepares her aliment by combustion, concoction and filtration; in cold latitudes concoction assists decomposition. In preparing a border, I would recommend equal proportions of soil, manure, and sand; all subsequent manure must be from the top, according to nature's rule. Stirring the earth often in warm weather is of great service. Yours, FRANCIS HAY.

Charlestown, March 6th, 1835.

ART. III. *On the Propagation of the Grape Vine; with Observations on its Management, Pruning, &c., in the Green-house and Grapery, and the Formation of Vine Borders.* By J. W. RUSSELL.

[Continued from page 97.]

IN preparing the vine border for the compost, it will be necessary to remove the whole of the soil, to the depth of three feet; but if the sub soil is found to be of a strong clayey nature, two and a half would be deep enough, rather preferring to increase the border in width, than to go too deep, especially, when the bottom of the border is cold and wet. Supposing the sub soil to be as just mentioned, I should recommend the earth to be dug out, two and a half feet deep, by fifteen feet in width, and also the building of a drain with rough stone, the whole length of the border, to be taken through the centre, or near to the front walk, remembering to give the bottom of the drain, a gradual inclination to that end of it, where the superabundance of water will be carried away. As to the dimensions of the drain, nine inches or a foot in width, by the same in heighth, will be found to answer very well; but this can be regulated according to the materials intended to be used. There will be no necessity when building the drains, to be particular in making close joints, as I should advise it to be covered over with fir shavings about six inches thick; they will be the means of stopping the soil from getting into the drain, and at the same time allow the water to pass off freely. The bottom of the border should be covered over six or eight inches thick, with large and small stones; the refuse of old walls and other buildings, or any other kind of course rubbish, will answer the purpose, finishing off with gravel, and leaving the surface as level as possible. This ought to be done in a thorough manner, because it is not one of those operations that can be done over again, without great loss of time, and considerable expense. There is frequently more pains taken with the house to fruit the vine in, than with the border for the roots, although its success depends, in a greater measure, on the compost it grows in, and in keeping it in such regular order, that the roots will not suffer, either with too much *wet*, or drought. I shall now consider the foundation laid, and ready for the compost. In order to have the border two and a half feet deep, we must consider that it will be necessary to allow something for the border settling; if it is taken up to the heighth of three feet, it will be found to be none too high; the longer it has been completed before the vines are planted the better; if these items are not particularly noticed, and the vines planted as soon as the border is finished, it would be found, when too late, to be a very great error; for the soil is sure to settle, more or less, according to the nature of the compost; and then by making the ground up again to the original level, the roots of the vines are deeper than they were at first intended to be, which will be very injurious. It will soon be seen that the holes in the front wall through which the vines are introduced into the house, must be cut out lower down, to free the stems of the vines. I have not the least doubt that the grape vine, generally, where it is introduced through the front wall into the house, will be found, on examination, to be somewhat injured by being pressed up too tight; when this is the case, they ought to be loosened immediately. This can be remedied in some measure at the time of planting; for instance, if it is supposed the ground will settle six or eight inches below what is intended to be the *level*, and it so happens that the planting of the vines cannot be delayed any longer, there is no alternative but to plant them on the surface of the border, just covering the roots. This would bring them about right, by allowing eight inches or a foot for settling. Where the sub soil is gravel or stone, there will be no necessity of forming a drain, because it is probable there would be a want of moisture, in such a situation; the border might, however, be made three and a half feet deep, by twelve in width. I am of the opinion that the *roots* of vines suffer more for the want of moisture in this climate, than with too much, taking the seasons upon an average.

In the months of April and May, we frequently have one or two days of heavy rains, and cloudy weather succeeding, with scarcely any sunshine for some days, when the vines under glass are in full leaf, showing fruit and growing freely. At times like this, I have known the leaves, wood, and fruit, to be more or less injured; sometimes the young wood is affected, that has attained considerable strength, with a disease that I have compared to the *rot*, that sheep, in some parts of the world are affected with. At first a small speck on the wood is discernible, but it is frequently not taken notice of before it has spread considerably. The *rot*, as I shall now denominate it, increases so rapidly round the young shoot, that it is soon destroyed. The petiole, or footstalk of the leaf is often affected in the same manner, and it not unfrequently makes its appearance on the peduncles or stems of the bunches, and a great many of the most promising are irrecoverably lost. I believe there is no practical gardener, however careless an observer he may be, but has repeatedly noticed, after pinching of the *tendril* or *clasper*, (which every bunch of grapes is provided with, no doubt by a wise law of nature, for its protection; when the vine is trained to trellises under glass, the tendril is of no *use*, so that it is, if I mistake not, universally pinched off with the finger and thumb,) the disease to strike the wounded part, and soon consume the remainder of the tendril; finally, the stem of the bunch is smitten, and the cultivator has the mortification of being an eye witness of the whole cluster of fruit gradually going to decay. Sometimes the tendrils upon healthy vines become fructiferous, and bear a few berries at their extremities. Nevertheless, I should prefer to take them off, as generally, the bunch is large enough without them, and always much handsomer in shape.

The ideas of cultivators are at variance, as to the nature of this disease that affects the vine; some say that it arises from the roots being planted in a soil, that is not congenial to their growth; but when we know that the border is well drained, and the compost is allowed by scientific practitioners to be (without one instance of failure) an excellent one for the growth of the vine, we must look for the remedy elsewhere. I will briefly state my opinion on this subject. It is a fact beyond a doubt, that it either arises from a *foul* atmosphere in the house, or a sudden check of the *vital* principle in the vine; in a word, a regular course of treatment should be pursued, from the vines first swelling their buds in the spring, to the ripening of the fruit; all stagnant air must be eradicated, and a free circulation of fresh air given daily. Even in rainy, damp weather, the vinery ought to be ventilated, at the same time keeping up a good brisk heat, to counteract the dampness. The house should be kept perfectly sweet and clean, taking away all the prunings of vines and other vegetable substances, immediately after the work is done. This is the preventive I should recommend, and I have no doubt that if it is strictly attended to, the disease will rarely or ever make its appearance.

The vines that have been raised from the eyes, can now be planted in the border. However, as they are growing in pots, they could be placed in the vinery, and by good treatment will continue to grow freely; it is also to be remembered that the whole growth of the vine, so far, is from artificial treatment, so that we should be careful in not giving the roots a severe *check*, by removing them from the pots into the border too soon. The middle or latter part of June will be early enough, waiting until the soil becomes naturally warm, and there is some prospect of a continuance of fine weather. When planting the vines, it will be necessary to be very careful in turning them out of the pots, to keep the ball of earth entire. For a grapery, I should recommend the vines to be introduced into the house every two and a half feet, through holes made in the front wall, to be left in a sloping position upwards, and the top of the hole to be about eighteen inches below the front *sill*, so that the stem of the vine will be covered six inches, and of course no part of it will be seen from the outside. This, in my opinion, is much better than leaving the stem of the vine naked, which is frequently the practice, for it leaves sufficient room under the sill, for the mulching of the border. The sudden changes of freezing and thawing in the spring of the year, has a bad effect on their stems when uncovered, and the sap in full action; and the hot rays of the sun in the summer months often checks the circulation of sap, by its influence on that part of the stem where it is introduced into the house. I have frequently seen vines, the extremities of their shoots wilted down, and even the whole of a strong healthy one to be affected; but when the stems are covered over five or six inches, neither freezing, nor the hot rays of the sun will affect them. The young vines should be looked over every two or three days, taking off all the lateral growths as they make their appearance; also shortening the tendrils, encouraging only one shoot, keeping it tied up as it advances in growth. When the weather is hot and dry, syringe them over with water that has been in the house some time, so that the chill is taken off. The roots, also, should be watered occasionally, when there is a continuance of dry weather. The best time to syringe the vines is in the evening, when the rays of the sun begin to leave the house, being mindful to give air every morning before the house gets very hot. It is a good plan to give a little air, say at seven o'clock in the morning, and again at eight or nine. Airing the house is a very important point, and if neglected, the vines will immediately show it. Where-ever long jointed wood is seen in a grapery, it is from allowing too much wood on the vines, so that one shoot is laid over another, and weakness must be the consequence; the rays of the sun cannot act upon the wood, and the house perhaps at the same time well aired every day. In order to have good short jointed wood, the shoots ought to be arraigned in such order that the sun and air may have free access to every part of the branch.

Yours, J. W. Russell.

Mount Auburn, Cambridge, March 11*th*, 1835.

(To be Continued.)

Art. IV. *On raising New Varieties of Grapes from seed; with an Account of the Variety called Pond's Seedling.* By Mr. S. Pond.

Gentlemen,

I offer you a few remarks for your useful Magazine, on the success I have had in raising new varieties of our native grapes from seed. I several years since, first commenced sowing seeds of the Isabella, Catawba, and of the common wild grape, and have annually sown a few seeds, with the hope of procuring some new and improved kinds. The soil in which I sowed the seed on my first trial, was light and rich. They were planted about three quarters of an inch deep. They nearly all came up, and grew vigorously—attaining the height of twelve or eighteen inches the first season, and the shoots proportionably strong. In the fall I pruned the vines down to within about four inches of the ground, leaving three eyes or buds. They were not protected during winter. In the spring I removed them from the seed bed, to a border on the East side of my garden, where they were trained against the fence. They there grew rapidly, and some of them made fine shoots; in the autumn these shoots were shortened according to the strength of the vines. The next spring the vines started early, and I perceived that one out of the whole number showed signs of fruiting. I took particular care to enrich the soil, and to do every thing to facilitate the production of a fine cluster of fruit. During summer the vine was regularly made fast to the fence, and a fine straight shoot encouraged, trimming of all laterals. As the berries arrived at their full size, I perceived they were very different from the Isabella, Catawba, or any other native kind I was acquainted with. I therefore concluded that it must be a new original variety, and waited patiently for the fruit to ripen.

About the first of September the fruit began to color, and unexpectedly, at the latter part of the month it was nearly ripe. The cluster was gathered the first of October, and found to be of equal or superior flavor, to any of our native grapes. The fruit was first presented to the Massachusetts Horticultural Society, in October, 1829, and pronounced by the committee to be a very superior variety.

The skin thin, pulp soft, berries round and purple, bunches fair sized, rather long; the wood grows short jointed, and strong; leaves shaped somewhat like the Hamburgh, and are destitute of the downiness on the under side, so common to other native grapes.

Ripens the latter part of September.

It is perfectly hardy, and stands our winters without the least protection. It will not, however, bear our hot summers and preserve that healthy appearance of other vines. Before I became acquainted with this fact, I was anxious to remove the vine, with the expectation of procuring a larger crop, from its cool aspect, to a warmer part of the garden. I then had built a high fence, facing the south, and removed it to its new situation. That season I procured two layers from the plant, and set them out a short distance from the old one, on an easterly aspect; they produced fruit much more abundantly than the old plant. This led me to suppose, that the situation of the old vine was altogether too warm, and after letting it remain another year, and finding it still to be shy in producing fruit, I removed it back to the place where it stood, upon its first bearing fruit from the seed. It is now growing finely, and makes luxuriant wood every season. Seedlings raised from this variety will undoubtedly be still better, and I have no doubt but that, if care is taken to raise plants from every progeny, varieties approximating very nearly to the foreign, will be the result. I have planted seeds of the Isabella, Catawba, and of this seedling, and have a number of vines of a large size, and a few of them have come into bearing. But none of them are very good, the foxy taste being predominant in most all. I shall continue, however, to sow the seeds of most of our native grapes, with the expectation of procuring superior kinds.

In a future paper I hope to give you some remarks on the propagation of asparagus, and also on the propagation and growth of the Plum tree.

Yours, SAMUEL POND.

Cambridgeport, Feb. 22nd, 1835.

ART. V. *On the Cultivation of the Dahlia.* By Mr. E. PUTNAM.

THE culture of this superb flower, which far surpasses all others, that our gardens in the autumnal months can produce, is very simple; and if the proper varieties are selected, but little care will be necessary, except in very unfavorable seasons, to ensure a full bloom from the beginning or middle of August, until the plants are destroyed by frost.

It is in airy situations, and in extremely rich and moist soils, that Dahlias produce their flowers most abundantly; but they will succeed perfectly well in gardens, however naturally dry, provided care be taken to manure the soil well, and to supply the plants with water, whenever they appear to require it.

The tubers should be planted four feet apart, each way, and about four inches deep, and whatever may be the number of eyes that vegetate, one only should be allowed to grow, as each plant should have but one leading stalk, which must always be securely tied to the trellis or stake, that is intended for its support. If the main stalk is properly secured, the side branches can be easily kept from breaking, by connecting them with each other, at about half their length, and at the same time encircling the whole plant with a small string in such a way, that all the branches can rest upon it. If these branches are numerous, a part of them must be cut off, as very bushy plants, in general, produce but few flowers.

The question is frequently asked, if Dahlias should be forced in their growth by artificial heat? I think not. If the soil in which they are to be planted is moist, it may be well to start the tubers under a warm fence, and not to transplant them until they have made shoots three or four inches long;—but if they are intended for a warm and dry soil, I should far prefer to *retard* their growth, even two or three weeks, as when planted early, they are apt to form their flower buds at a period when the weather is both so hot and dry, as to cause these buds to perish as fast as they are formed.

The best mode of propagating Dahlias, is by a division of the tubers, which should be effected in such a way as to give to each tuber an eye, as without it, the tuber would be good for nothing. Dahlias are also, sometimes propagated by cuttings and grafting—but the latter method is quite useless, as it is at best, but an inconvenient substitute for the former. Cuttings too, it is seldom worth while to resort to, unless it is wished to increase rapidly some choice variety, for if they are struck late in the open ground they neither produce good flowers, the first season, nor ripen their tubers well. When struck, however, in February or March, in a green-house, cuttings make as good plants, in every respect, as tubers, and by many are supposed to blossom even more freely.

New varieties are of course procured from seed, and if this be sown early in a hot-bed, one half of the plants will blossom the first year. But a person must have the best of seed, and great good luck, who from a hundred varieties obtained in this way, should find one, that would be really worth keeping.

The following rules have been established at the English Amateur shows, for the comparison of Dahlias with each other.

The flowers must form as near a hemisphere as possible.

They must be rose leaved, that is, must have their petals round and entire, not jagged nor fringed. If selfs, (that is, of one color,) then the color must be bright and clear.

If variegated, they must be regularly so, with each petal marked like its neighbor, and not irregularly spotted.

The flowers, too, must be supported on stems which hold them out beyond the foliage, and render them distinct to the eye.

Now a Dahlia possessing all of these qualities, would undoubtedly be very handsome, yet the rules, which require them, are so artificial and restricted in their application, that even in England they are not always submitted to, as the prize varieties which have been imported into this country clearly prove. It is, however, universally admitted, that, whatever may be the peculiar form of a Dahlia, its petals should be regular in their shape, and their color bright and distinct.

In the preceding remarks, I have intended to give merely the result of my own experience. In some points, it may hereafter appear that I have been mistaken, but it may be proper for me to add, that, whenever I have planted my Dahlias in such a soil and situation, and cultivated them in such a manner as I have now recommended, I have always been successful—but have never succeeded when I deviated from it.

A few hints in regard to taking up the tubers, and their preservation through the winter, I will communicate hereafter.

Yours, E. PUTNAM.

Salem, March 10th, 1835.

ART. VI. *Observations on the Cultivation of Annuals; with an Account of those choice and beautiful of late Introduction; and Remarks on the Varieties most suitable for planting in Masses.* By the CONDUCTORS.

Mimòsa sensitiva (Sensitive plant). This delicate and very curious plant is easily cultivated. The seeds should be sown in pots of light, rich soil, and placed in the hot-bed. When the young plants have made three or four leaves, they should be potted separately into small pots, and replaced in the hot-bed, or green-house, until May, when they may be turned out in the open ground in the flower border, or retained in the pots. We prefer keeping the plants in pots, as the heavy rains, which we often have during summer, injure them, and prevent their showing that sensibility for which they are so much admired. Their graceful foliage appears to much better advantage in pots than in the border.

Verbèna Aublètia. This beautiful annual is at present rather rare, and in few gardens. It ripens very little seed when grown as an annual, and will consequently not become so common as some varieties. We had several fine plants last season, which flowered in profusion until checked by frost. The seeds were sown in the hot-bed, and the plants removed while in the seed leaf, into small pots, filled with a compost of equal parts loam and leaf mould, with a little sand. They were shifted into larger pots when required, and some of the plants we turned into the border about the first of June, where they flowered abundantly.

Petùnia nyctaginiflòra (White flowered Petunia). This elegant annual has not yet become very common; but its great beauty entitles it to a place in every flower garden. We have seen plants completely covered with its snow-white and fragrant flowers. It is sometimes called *Sweet scented Tobacco.* It was formerly arranged under the genus Nicotiàna, from which, probably, the name arose. The seeds should be sown in a pot, and placed in the hot-bed, and shaded for several days. They should be slightly covered with soil, as they are very small, and would be apt to rot if they were planted deep. When the young seedlings have made three or four leaves, plant them singly in small pots, and place them in the hot-bed, until warm weather. The plants should then, except such as are intended to be kept in pots, be turned out into the flower border. The shoots may either be allowed to trail on the ground, or trained up to a trellis or stake. The latter method we prefer, as we think the flowers show to much better advantage, and are not liable to be soiled. When they are not trained up, the heavy rains dash the soil over their delicate white flowers, and destroy their beauty. The plants will flower until killed by frost. If one or two are preserved in pots, they will bloom well in the parlor or green-house until midwinter, and if protected till spring, will resume their growth, and continue to display their flowers all summer.

There are now three varieties, Petùnia nyctaginiflòra, phœnícea and Willmoreàna. The phœnícea is very beautiful, being of a deep rich purple. Botanists have been divided as to the proper genus to which it belongs, and the following names have been given to it by Dr. Hooker and others:—Salpiglóssis integrifòlia, Petùnia violàcea, and Nierembèrgia phœnícea. Mr. David Don has, however, satisfied botanists, that it belongs to the genus Petùnia, and it is now known under the specific name phœnícea.

Cánna índica (Indian shot). The plants of this showy genus are principally natives of the tropics. The índica and lùtea are, however, easily cultivated in our gardens. We had them in full bloom last season, during the months of August and September. The seeds were sown in pots in the hot-bed, and the young plants removed singly into small pots in rich soil, and placed in the hot-bed until June. They were then turned out into the ground, where they flowered finely—throwing up their scarlet and yellow spikes of flowers, to the length of fifteen or twenty inches.

Mesembryánthemum cordifòlium (Ice plant). The seeds of this singular plant should be planted in pots in light sandy soil, and the pots placed in a hot-bed. When the young seedlings are sufficiently large, they should be potted into small pots, in the same kind of soil in which the seeds were sown. As soon as the roots fill the pots, they should be removed to a larger size. This should be performed as often as required. The plants look much better in pots than in the flower border; and although we have grown them both ways, we prefer the former. They are highly ornamental, and contrast very prettily with other annuals.

Ipomœa quamóclit (Cypress vine). This exquisitely beautiful annual climber we consider as one of the most ornamental plants, which decorate the flower garden. Its elegant crimson, star-shaped flowers, intermingled with its fine, delicate, and deep green foliage, presents a mass of beauty not to be found in any other plant among the whole list of climbers. There is a white variety much valued, and which is not so common as the scarlet. We have cultivated both varieties, and growing and twining together, they have a fine effect; but we prefer, when planted singly, the crimson, to the white. The seeds are rather difficult of vegetation, and often fail, from want of preparation previous to planting. If the seeds are planted in a pot and placed in a hot-bed, with a *very* strong heat, they will sometimes vegetate, but they start much more freely, if previously to sowing they are soaked in warm water several hours, pouring it upon them when scalding hot. This is the method generally adopted—but we have tried several experiments, and have scarcely ever found the seed to fail when managed as follows;—take the seeds, and with a sharp penknife, cut off the hull at the small end. This will allow the germen to swell, and burst the remaining part of the hull. We have had them come up in three or four days after sowing, when treated thus, and we have not the least hesitation in recommending this method. Only one thing is necessary, to be careful in cutting off the hull, not to injure the germen. When the young plants begin to show their pinnated leaves, and all danger of frost is over, turn them into the flower garden, where wanted to ornament any particular place. They will not twine round a stick if it is perfectly smooth. We have formed pyramids of the cypress vine by driving down a tall stake in the centre of several plants, which were placed about six inches from the base. Strong pieces of twine were made fast at the ground near the plants by means of pegs, and tied at the top of the stake. When the plants cover the whole space, they form a compact mass of leaves and flowers in a pyramidal shape. We prefer this style of training to any other, not only as beautiful in itself, but as displaying the flowers to the greatest advantage.

(To be Continued.)

Art. VII. *Observations on the Camellia, and its Varieties, with some Account of its Introduction into Great Britain and this Country.* By M. P. Wilder, Esq.

In continuation of my remarks on the cultivation and treatment of the Camellia, I would observe, that to secure a full and healthy development of their flowers, the plants must be strong and well grown. Under the influence of improper or indifferent management, no correct idea can be formed of their size and beauty.

To grow the Camellia to perfection, care should be taken that the plants have the essential pre-requisites of proper compost and perfect drainage, and at all seasons of the year a regular supply of air and water; due regard being had to time and temperature.

When not in a growing or flowering state, they need only be moderately watered, but on no account should they be suffered to become dry, under the false but prevalent notion, that starving them for water, will produce a plentiful supply of flower buds.—It has been my constant practice to keep the soil in the pots moist, and to give water as soon as the surface began to be dry.

The Camellia, during the winter, should be kept in rather a low temperature, (say 40 to 45 deg. of Fahrenheit,) until the buds commence swelling, when to ensure a splendid bloom, the heat should be raised to 50 or 60 degrees. At the time of flowering and making new wood, the plants should be abundantly supplied with water, and when the young shoots are changing color and becoming hard, if the heat be increased to 70 or 80 degrees, it will cause them to form their blossom-buds in greater profusion.

While in the green-house, the plants should have a situation assigned them, so as to receive as much light and air as practicable, of which they should be the daily recipients, whenever the weather will permit; but they should not be exposed to the full rays of the sun from May to September. When moved out to their summer residence, which will be about the first of June, or as soon as the flower buds are formed, they should be placed under a shade, or in a shady situation, to protect them from its scorching rays at noon, and to give them its influence for a few hours, morning and evening of each day. If it be necessary, however, to expose them to the sun, they should be arranged compactly together in a circular form, with the tallest in the centre, in regular gradation, according to their height, thus protecting their roots from the intensity of its mid-day heat.

During the hot season, the plants should be watered at evening, leaving them to imbibe the moisture through the night, and in dry weather frequently be syringed over their tops, with clear cold water, which will much increase the health of the plants, and beauty of their foliage.

In this latitude it is not uncommon in the early fall months to have cold nights, succeeded by hot days, producing a variableness in the temperature, of many degrees. It is well, therefore, to remove the Camellia to the green-house as early as the middle of September, and although it is said it will bear several degrees of frost without injury, I am confident if the plants are exposed to a temperature where they become chilled, and of course the sap suddenly checked in its circulation, it will either cause the flower-buds to languish, and finally fall off, or prove a serious detriment to their free and perfect expansion.

The flowering of the Camellia may be forwarded, or retarded, by being subjected to a higher or lower temperature; and though its natural season for blooming is in the winter, and early spring months, by this treatment a succession of flowers may be kept up throughout the year. An example of the effect of this management may be seen in a large plant of the Double White, belonging to the Hon. John Lowell, Roxbury, and which, he informs me, has so changed its natural disposition, that it now comes into blossom, in August.

If wanted to flower early, it must be excited by an increase of heat, to make its spring growth earlier than usual, and be returned to the green-house in the month of August; but as the weather will then, occasionally, be warm, it will be necessary to place the plants near the front sashes, and to expose them, except on frosty nights, to the external air, and thus by degrees gradually accustom them to the atmosphere and temperature of their residence; or if we wish to retard their flowering, it is only requisite to keep them in a temperature so low, that the buds will not commence swelling, until the time when the flowers are desired.

Having, Gentlemen, detailed my experience in the cultivation of this elegant exotic, I shall, as proposed, annex a descriptive list of those valuable varieties, of which I have a knowledge, and for which I shall be indebted, in many instances, to the following standard works, viz.—Illustrations of the Camèllia, Chandler & Booth, folio, London, 1829; Les Camélleæ de Bollwiller, par Charles A. et N. Baumann, folio, France; Loudon's Gardener's Magazine; Transactions of the Horticultural Societies of London and Berlin, &c. &c.

The following species compose the natural order Camélleæ, according to Loudon's *Hortus Britannicus*:—

1. THEA VIRIDIS. Asiatic Researches.
Camèllia víridis.
Green Tea.

This is the shrub that produces our green tea. "A large, strong growing, almost hardy plant,* its leaves, three to five inches long, very broadly lanceolate, pale green, singularly waved, with the margin reflexed; the flowers large, white, solitary, mostly confined to the upper axil."—(*Dr. Hooker's Bot. Magazine.*)

2. THEA BOHEA. Asiatic Researches.
Camèllia Bohèa.
Bohea Tea.

From this species is derived the *Black Tea*, under whatever name it is sold from our shops. It is a plant of more feeble growth, and not so hardy as the former. The flowers are white, small, fragrant, and are borne in clusters in the axils of the leaves.

3. CAMELLIA EUROYIDES. Botanical Register.
Eurya-like Camèllia.

This species, as I have before stated, is considered the connecting link between the two genera, Thèa and Camèllia; but little is known of it at present, except, that its flowers are white, and resemble, in many respects, the Eurya chinensis.

4. CAMELLIA OLEIFERA. Abel's Journal in China.
Oil Seed Camèllia.

Messrs. Chandler & Booth, in describing this species remark, "that it is the famous oil seed tree of the Chinese, and called by them *Teha-Yeoa,* which may be interpreted the '*oil bearing Tea Plant;*' a very expressive name, as the plant in appearance closely resembles the Tea. It is sometimes formed of the magnitude of a moderately sized cherry-tree, and bearing a profusion of single white blossoms; that the fields which it covers, in the distance, look as if lightly clothed with snow, but on a nearer approach, exhibit one immense garden."

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* A green tea plant has lived for many years in the open air, at the nursery of the Messrs. Loddiges, near London.

5. CAMELLIA KISSI. Dr. Wallich; Asiatic Researches.

This species is of recent introduction, it is from Nepal, and in its growth and appearance bears a strong resemblance to the Thèas. The flower is said to be white, but I have no knowledge that it has ever flowered in Europe or this country.

6. CAMELLIA SASANQUA. Thunberg.
Lady Bank's Camëllia.
Chaw Whaw of the Chinese.

This shrub is of slender growth, the foliage small; the flowers are white, semi-double, and smaller than those of Camëllia oleifera.

1. Camëllia Sasánqua, *var. plena alba.*
Double White Sasanqua.

This plant is like the former in almost every respect, except that its flowers are double and very much resemble a small white Rose.

2. Camëllia Sasánqua, *var. rubra plena.* Botanical Register.
Camëllia maliflòra. Lindley.
Apple blossomed Camëllia.

This is a beautiful variety. The flowers are of a clear rose color, seldom exceeding two inches in diameter; very full and regular in formation, resembling strongly the apple blossom, from which circumstance it derives its name.

7. CAMELLIA RETICULATA. Botanical Register.
Reticulated Camëllia.

"This is by far the most splendid of the genus that has yet been introduced. The flowers are remarkably handsome, and have a great resemblance to the Pæónia montan ròsea; and when expanded, measure no less than five inches and a half in diameter. It is more difficult to propagate than any of the other Camëllias, and the only safe way is by inarching on the single Red Camëllia. We are of opinion, that when it becomes so plentiful as to admit of a trial being made, it will be found to be hardier than the Camëllia japónica, and at no distant period, perhaps, may ornament our shrubberies."—(*Chandler and Booth's Illustrations of the Camëllia.*)

8. CAMELLIA JAPONICA. L.
rùbra simplíci.
Single Red Camëllia.

This was the first Camëllia introduced into Great Britain, and was known at that time (1739), by the different names of *Thea Chinensis* and *Rosa Chinensis.* It is of free growth, and arrives, in its native country, to the size of our plum trees. There is a fine plant of this species at the Cambridge Botanic Garden, which is more than twelve feet in heighth. The flowers are of a bright rose color, and freely produced; it seeds readily when impregnated, and from this species have been derived most of the varieties now extant.

(*To be Continued.*)

ART. VIII. *On the Cultivation of the Chinese Chysanthemums (Chrysánthemum sinénse.)* By the CONDUCTORS. *To which is added, a new Arrangement of the varieties, by the late* ADRIAN HARDY HAWORTH, Esq., F. L. S. &c., author of the Narcissinearum Monographia, &c. *Extracted from Loudon's Gardener's Magazine.*

THE first descriptive account of this most beautiful group of plants, was given in the London Horticultural Society's transactions, Vol. v. p. 232, &c., by the secretary, Mr. Sabine. In the previous volumes of this work, he particularly described several varieties, as they were introduced into the Society's garden at Chiswick. Since then nothing has been published respecting them, until a new arrangement appeared in Loudon's Magazine, by Mr. Haworth, in January, 1833.

It is almost wholly to the Horticultural Society of London, that praise is due, for their exertions in introducing the different varieties of this elegant autumnal flower. The Chinese are supposed still to possess a large number of kinds not yet known to English collectors; and as they are one of their greatest favorites in the decoration of their gardens, it was with considerable difficulty that the kinds already introduced were procured. The credit of their first introduction into Europe, is said, by Mr. Sabine, to be due to "M. Blancard, a merchant of Marseilles, who, in 1789, imported three different plants from China, one with purple, one with white, and one with violet flowers. He lost the two last; the first lived and was sent to the Jardin du Roi at Paris, in 1791." This is the variety called the old purple—by Mr. Haworth, Tassalled purple. From 1798 to 1808, Sir Abraham Hume imported seven new kinds, which are now among our oldest varieties. Much praise, however, is due to him for his exertions in procuring them. Between 1808 and 1818, only two kinds were introduced. By this time the taste for chysanthemums had become much extended, and the Horticultural Society directed their attention to the importation of new varieties. In 1819–20 fifteen kinds were received, and subsequently all the varieties which are now known. The London Horticultural Society possessed, several years since, forty original drawings made from growing plants in China, and but few of them were then referable to the plants imported.

At what time the first Chysanthemums were introduced into this country we have no accurate account, but we may suppose it to have been about the years 1805–6. Nearly all the varieties have been subsequently imported, and above fifty kinds are said to exist in our gardens. We have never, however, seen more than thirty, having cultivated that number for the two last seasons. In the fall of 1831 a plant was presented at the Massachusetts Horticultural Society, by Mr. J. M. Ives of Salem, which he received from Japan. Professor J. L. Russell, then residing at Salem, supposed the plant to be a variety of the C. índicum, and so communicated it in a paper to the N. E. Farmer, (Vol. xii. p. 147.) But upon a subsequent consideration, and at a suggestion of ours in relation to the plant not being a variety of C. índicum, he corrected the error. This variety possesses little beauty when growing with the other kinds; but when blooming profusely by itself, it forms a very pretty object. It has been named by Mr. Russell, bellideflòrum, on account of the resemblance of the flower to the Daisy.

Several attempts have been made by English amateurs and cultivators, to seed the Chysanthemum, and consequently procure new varieties. But we believe the efforts of those who have made the trial, have never been successful till the season of 1833. In the fall of that year Mr. Wheeler, a nurseryman near London, presented, at the Horticultural Society *twelve* seedling varieties, six of which were said to be exceedingly beautiful, and to form a great addition to the Chinese kinds. Mr. Wheeler was awarded a medal by the Society for his success. We may therefore anticipate as many varieties of the Chysanthemum as of the Camēllia. It was a long time after the introduction of the latter flower, before seedling varieties were procured, but they now number above two hundred. We may expect, in a few years, additions to our Chysanthemums full as numerous, and of as distinct a character.

The Chysanthemum will never be of great ornament to our gardens, if planted out in the open border. The early frosts of September and October, (with the exception of one or two seasons in several,) destroy the plants just as they show their blossom buds; thus preventing the display of their flowers. We have never known in our garden, a good bloom when planted in the border, although in some gardens in warm situations against a wall, or in the city, they often bloom until vegetation in other places has been destroyed, scarcely leaving a vestige of summer. We would therefore recommend planting them in pots, and transferring them, in the season of their flowering, to the parlor or green-house. Their splendid appearance in these situations, during the months of November and December, is not surpassed by any other herbaceous flower. And in our estimation, they vie in richness and magnificence, with the Tulip and Dahlia. The season at which they bloom is when all the other productions of the flower garden and pleasure ground, are destroyed by the cold frosts, and chilling blasts of autumn; their various forms and brilliant colors, also, excite our admiration; some are expanded, some quilled, others tasselled, curled and recurved; the colors of the flowers are of almost every shade, from the purest white to a deep purple. It is only from a prejudice, that the flowers are common, that they are not more highly valued. If a fine collection of twenty or thirty varieties is seen in full beauty, we are confident that nothing further need be urged, to recommend them, as amply repaying in their splendor, all the care that may be bestowed on their cultivation.

The chysanthemum is perfectly hardy, and will stand our coldest winters when planted in the open garden, without any covering. But as we cultivate our varieties in pots, we prefer to winter them, by placing the pots in a cold frame, or dry cellar, where they are not watered until April; a warm, moist cellar, will be injurious to the plants; as it would cause them to draw up weak, from want of light and air; in April we set the pots out in the garden in a warm place, on a south border, and give the plants water as they require. They soon begin to grow, and make fine vigorous shoots for propagation.

If large plants are wanted, the method of growing them is, to take the old ones out of the pots, and shake off the soil; pull off all the suckers but one or two, and re-pot the plants in the fourth size pots, (supposing them to have been in the third,) in a suitable compost, giving water every day after they are well rooted. This was formerly the method pursued by most gardeners, and was practised for many years with the English growers, until the Chinese method became known. This, so superior in all respects, not only saving time in the propagation, but as forming much more beautiful plants, has completely superseded the common modes.

As soon as the plants have made shoots six or eight inches long, cuttings should be taken off (the latter part of April) about four inches in length, cutting smoothly across at a joint. Strip off the lower leaves, and insert them in pots of the third size, (six in each,) in a soil composed of loam, peat or leaf mould, and sand—place the pots in a shady situation for a few days, until rooted, when they should have the sun a few hours in the morning. About the middle of May they should be potted singly into small pots, in the same soil. The latter part of June they should be again potted into the fourth size pots, using a compost of loam and well decomposed manure, in the proportion of one-third of the latter to two-thirds of the former, adding a small quantity of sand. The plants should be topped in the first part of July, and well watered, (using liquid manure occasionally,) every day, throughout the season. This will add greatly to the luxuriance of the plants, which will soon be perceived in the strong appearance of the foliage. They should be kept in a situation where they will be shaded from the heat of the mid-day sun, until September or October; placing the pots on boards, so that the worms will not enter them. Upon the approach of cold weather, they should be removed to the green-house, or wherever they are intended to be kept. They should not be allowed to be touched with frost, when they are forming their flower buds, as it injures them very materially. The plants should be trained with three or four branches, and tied to sticks as they proceed in growth. In this manner they form stout, bushy, compact plants, and produce flowers, of the large kinds, five or six inches in diameter.

The suckers may be used instead of cuttings, if desired, or to save time; but cuttings make by far the best plants, throwing up but few suckers and growing more bushy. The pots may also be plunged during summer, but they are apt to make strong roots through the holes in the pots, into the ground, and when taken up, they are apt to be injured in their blooming.

This is the result of our practice, and we have never failed in procuring as fine a bloom of flowers as could be desired. They will flower in any soil, provided it is rich, but the compost we have mentioned, we have found to give the plants a more vigorous and strong growth. The following arrangement of this elegant genus, we have copied from a communication in Loudon's Gardener's Magazine, communicated by the late A. H. Haworth, Esq. This gentleman was enthusiastic in his devotion to Botany and Entomology, and his loss will be severely felt by those who take an interest in these sciences. We have adopted this arrangement in our collection of plants, and we would suggest to nurserymen, as well as amateurs and gardeners, who have good collections, the importance of arranging them according to this method.

Considerable confusion exists in the names of Chysanthemums; some varieties are mere synonyms of others, and several are incorrectly named. We have in contemplation the cultivation of every kind now existing in the various gardens, for the purpose of comparing them, and correcting their names. They are a favorite flower with us, and we hope to be able to gather such information, as will enable us to offer our readers a correct list of the sorts, agreeing with the names and descriptions given by Mr. Sabine and Mr. Haworth, in the London Horticultural Society's Transactions, and Gardener's Magazine.

A new Arrangement of Double-flowered Chinese Chrysanthemums.

* RANUNCULUS-FLOWERED.

1. *Yellow Indian*, Hort. Trans. v. 4. p. 330. tab. 12. and v. 6. p. 346. Of short stature (in its group), with very late and double, but small, flowers; and forms, with the next, a distinct species.
2. *White Indian*, Hort. Trans. v. 6. p. 347. Shorter than the preceding, with very late and similar, but white, flowers.

3. *Warratah Yellow*, Hort. Trans. v. 6. p. 344. Flowers very late, with the preceding, and of similar size, but has much more entire leaves, and larger flowers, which make it a distinct species.
4. *Spanish Brown*, Hort. Trans. v. 4. p. 486. and v. 5. p. 420. Of short firm stature, and rather early and beautiful flowers, the size of the preceding, and with smallish leaves a little more pinnatifid, and probably a distinct species.
5. *Blush Ranunculus-flowered*, Hort. Trans. v. 6. p. 328. Of short firm stature, and fine-formed early flower, of a blush color, and peculiar neatness of form. I think I have two variations of it.
6. *Small Deep Yellow; Park's Small Yellow*, Hort. Trans. v. 6. p. 327. Taller and weaker than the last, early and small flowered, with small and blunt pinnatedly-lobate leaves. Perhaps it may be a distinct species, from its small leaves and flowers.
7. *Small Pale Yellow; Small Windsor Yellow*, Hort. Trans. v. 5. p. 415. and v. 6. p. 335. Also called Aiton's Yellow. Of short stiff growth, and early flowering, and but little merit.
8. *Small Flat Yellow; Small Yellow*, Hort. Trans. v. 5. tab. 17. and v. 5. p. 422. Of shortish growth, and with pure yellow and expanded early flowers, the shape and size of the three subsequent varieties, of which it is presumed to be the origin, as yellow is the most predominant color in these plants. Their forms are very neat and regular.
9. *The Buff, or Copper*, Hort. Trans. v. 5. p. 420. Also called the Orange, or Buff. Resembles the preceding in every thing but color.
10. *The Rose, or Pink*, Hort. Trans. v. 4. p. 344. Also called the Lilac. Resembles the last in all things but color, and is now the most common kind in cultivation, although introduced after the old purple hereunder enumerated.
11. *The Pale Pink*, Hort. Trans. v. 6. p. 336. Raised in Mr. Colvil's nursery, being a sportive branch from the last, and differing in nothing but color. This and the three preceding doubtless sport mutually into each other, and are perpetuated by cuttings of their respective sports in the first instance, and offsets as well as cuttings afterwards; but are all liable to sport again, from pale pink through deeper pink, and copper or light orange to bright yellow: but their shoots and leaves are immutable.
12. *Expanded Light Purple*, Hort. Trans. v. 5. p. 153. and v. 5. p. 421.; and Bot. Mag. tab. 2256. Of middling size, and with flowers in the middle season (of its group), but nearly twice as large as the last, though resembling it in form, and far more handsome.
13. *Quilled Light Purple*, Hort. Trans. v. 5. p. 155. and v. 5. p. 421. A sport only from the last, but now made permanent.

** INCURVING RANUNCULUS-FLOWERED.

14. *Incurving Lilac*, Sweet, Brit. Fl. Gard. tab. 7.; *Curled Lilac*, Hort. Trans. v. 5. p. 155. and p. 421. Also called the Quilled Lilac. Grows tall, and flowers early, and is an elegant plant, allied to the preceding, and has produced the following one from a sportive branch.
15. *Curled Blush*, Hort. Trans. v. 6. p. 326. Has been called the Double Blush, and Double White. The flowers, which are rather early, large, and showy, dying off nearly of that color. It is of middling stature in its group; and, although a sport only of the preceding, is now an established and more beautiful variety than it.
16. *The Quilled Pink*, Hort Trans. v. 4. p. 350. and v. 5. p. 351. 420. 421.; and Bot. Reg. v. 8. tab. 616. Of tall stature, and one of the very latest in blooming; but very handsome, and repaying by its beauty every care bestowed upon it by the gardener. It has been called the most beautiful of all; but with me it yields to the Gold-bordered Red.
17. *Large Quilled Orange*, Hort. Trans. v. 5. p. 152. tab. 3. (upper figure),

and v. 5. p. 421. A tall and large latish-flowering variety, of considerable beauty, and at present uncommon.

18. *Gold-bordered Red; the Two-colored Incurved* of Hort. Trans. v. 6. p. 332. 333. Of tall stature, very late, with the most perfect and beautiful flower of all its genus, although only of the middle size. The red petals are striped with gold beneath, and golden-tipped there; which tips, incurving strongly and gracefully, show the gold in a front view of the flower, which is golden likewise at its base within. I consider it the most complete of all.

19. *The Superb White*, Hort.Trans. v. 4. p. 338. and v. 5. p. 420. A late, very tall, and splendid plant, with large, incurving, very double, pure white flowers.

*** China-Aster-flowered; often showing a disk, and then much resembling China Asters.

20. *The Sulphur Yellow*, Hort. Trans. v. 4. p. 341. and v. 5. p. 420. A beautiful variety, of tall stature, and free and early blooming, with middle-sized aster-like flowers.

21. *The Two-colored Red*, Hort. Trans. v. 6. tab. 4. and v. 6. p. 342. 343. A very fine and showy variety, of the middle size in stem and flowers, but rather late, which sometimes shows a disk, and is then very aster-like. The bipinnatifid leaves are far more laciniated than any other kind; and I think they constitute it a distinct species.

22. *The Early Crimson*, Hort. Trans. v. 5. tab. 3. (inferior figure) p. 151. and p. 421. Of light small stature, delicate, and apt to lose its leaves before its bloom is finished. The flowers are middle-sized, early, and very beautiful; they show a disk, and, when well managed, have ripened perfect seeds in England.

23. *The Clustered Pink*, Hort. Trans. v. 6. p. 336. Also known by the name of the Changeable Blush. One of the tallest of its tribe: flowers in the middle season very abundantly; and, although the flowers are but middle-sized, and little better than half-double, showing a considerable disk, and greatly resemble China Asters, they make a very fine and durable appearance, standing the weather well, and becoming much darker by age, though less delicate. This is a very likely variety to produce seed in this country.

24. *The Early Blush*, Hort. Trans. v. 6. p. 326. This tall and almost unequalled variety is also called the Double Blush, and Double White. It flowers very early, beautifully, and freely, and its flowers are large, and scarcely show any disk; and their color without is light blush, but within they are exactly of that peculiar tint well known by the name of French white; and, like many other varieties, they are very durable. They have ripened seeds in England.

25. *The Paper White*, Hort. Trans. v. 5. p. 417. 422. This exquisitely white-flowering and noble variety is of tall stature, and early blooming, and makes a splendid appearance in a general collection. Its flowers are of the middle size.

**** Marigold-flowered; with well-formed double flowers, resembling Double Cape Marigolds in shape and size.

26. *Golden Bronze-back; Golden Yellow*, Hort. Trans. v. 6. p. 342. and Bot. Reg. tab. 4. (superior figure). Also called the Large Yellow and the King's Yellow. A very tall, handsome, and free-flowering variety. The flowers are early, and of a high rich yellow color, but bronzed or orange in the buds and on their outsides. This is one of the best to grow as a standard; and if parted at the root and annually transplanted, succeeds very well as an herbaceous plant, especially if in a warm or sheltered situation, duly supported by a stick.

27. *The Superb Clustered Yellow*, Hort. Trans. v. 5. p. 156. and v. 5. p. 421. and Sweet's Brit. Fl. Gard. tab. 14. One of the finest and tallest of the group, being higher than the preceding, and with more clustered and more neatly formed, pure yellow flowers, but they are later in opening.
28. *The Golden Lotus-flowered*, Hort. Trans. v. 6. p. 340. A very splendid and large long-leaved variety, and nearly or quite the tallest of this genus of plants; having late, pure, and deep yellow flowers, above the middle size, and larger than those of any other yellow kind of the marigold form, and which partially endure until the heavier frosts of winter destroy them.
29. *The Changeable Pale Buff*, Hort. Trans. v. 6. p. 380. and tab. 3. Also called the Pale Cluster. This plant, when flowering as perfectly as it is represented on the above cited-table, is one of the most showy and splendid in the group; but this has not been the case during the autumn of 1832; all the flowers, and in various gardens which met the writer's eye, being, as it were, degenerated into almost buff-colored and spuriously quilled flowers, of more upright appearance than the large, expanded, flat petaled, and variegated purple whitish and yellow-buffy ones, so charmingly depicted in the figure cited. They are of the middle season.
30. *Starry Changeable Purple; The Starry Purple*, Hort. Trans. v. 6. p. 339. This beautiful plant is one of the most variable-flowered in the genus; its very late flowers first opening of a purple color, with the exterior petals at first few in number, starry and paler, especially at their expanded spoon-shaped tips, soon, however, becoming still more pale until the whole well expanded and very double blossom becomes regularly more blush-colored and white, than purple, and is a very fine, well-formed, variegated flower. The stature of the plant is of the middle size, but its remarkable leaves are much more laciniated than usual, and often broader in their outline than long, which is not the case with any other in the group, and of very considerable size. Wherefore I conceive it may be a distinct species from all the others.
31. *The Late Purple; The Late Pale Purple*, Hort. Trans. v. 5. p. 413. and v. 5. p. 422. and v. 6. p. 353. Also called Large Pale Purple. This is a very late flowering and rather tall variety, whose middling-sized and well expanded blossoms are very neat, and resemble in shape those of the preceding, but are much smaller.
32. *The Brown Purple*, Hort. Trans. v. 6. p. 341-2. A tall and slender-twigged very late-flowering variety, whose middle-sized flowers resemble the last in shape, but are not quite so flat and neat in expansion, and their color in the group is very remarkable, being of a very dull brownish or reddish purple. The leaves are so small and so bluntly lobed, and on such slender shoots, terminating in such long and graceful peduncles, that the plant is probably a distinct species from Chrysánthemum sinénse, and differs not so much in leaf as in flower from our No. 6., the Small Deep Yellow; above.

***** TASSEL-FLOWERED; being tall or very tall plants in their genus, with very large double, and more or less conspicuously drooping flowers, whose petals are usually elongated and quilled, and often greatly resemble the form of a tassel.

33. *The Tasseled Flame Yellow; The Quilled Flame Yellow*, Hort. Trans. v. 4. tab. 14. p. 349. and v. 5. p. 421. The magnificent flowers of this tall plant appear rather late, and often measure above five inches in expansion; and make, perhaps, if not a more neat, at least a more showy appearance than any other of the group, being double, and composed of innumerable chiefly quilled incurving petals, hanging more or less downwards, and when at their best resembling a flame-colored tassel.

34. *The Tasseled Salmon; The Quilled Salmon*, Hort. Trans. v. 5. tab. 17.* (inferior figure) p. 414. and p. 422. This is a late-flowering, slender, and graceful plant, with large tassel-like, and half-expanded drooping quilled salmon-colored flowers, and is very uncommon.
35. *The Tasseled Yellow*, Hort. Trans. v. 6. p. 329. A very tall and strong-growing large-leaved variety, with numerous tassel-formed flowers of the largest and most showy kind, often measuring more than five inches over, and appearing rather early. It is one of the most desirable and free-growing of the whole collection.
36. *The Quilled Yellow*, Hort. Trans. v. 4. p. 341. and v. 5. p. 420. This is a tall variety, with rather large flowers, of the middle season, or later, producing its blossoms in clusters at the top of the strong upright shoots. It is also known by the name of the Quilled Straw.
37. *The Late Quilled Yellow*, Hort. Trans. v. 6. p. 343. This has been called a very late and not very desirable variety in collections. It appears to be of the middle size, but it has not yet opened its blossom-buds with me, not having long possessed it.
38. *The Large Lilac*, Hort. Trans. v. 4. p. 343. and v. 5. p. 420. Also called the Late Lilac, the New Lilac, and the Semidouble Purple. A very tall upright plant, bearing but few double large and clustered flowers at the summits of the branches, and those so late in appearance, that in cold seasons they cannot expand well, and are consequently in but little repute. I have only seen one plant in blossom, and that in my own garden.
39. *The Tasseled Lilac*, Hort. Trans. v. 6. p. 332. A middle-sized or rather tall plant, of very great beauty, and one of the most desirable of the whole group, having very showy tassel-formed flowers, five inches or more in expanse, very numerous, early, and elegantly drooping from their weight, but they often show a disk. It is a likely variety to produce seeds of the most promising kind, but I have not hitherto heard of its ripening any in England.
40. *The Tasseled Purple; The Purple*, Hort. Trans. v. 4. p. 334. Has also been called the Old Purple, the Old Red, and the Quilled Purple, and is figured in the *Bot. Mag.* tab. 327. This is a very beautiful and rather early-flowering plant, of almost the middle size. The flowers are very numerous, gracefully drooping, and of middling size, and are at first of a reddish purple color, but become paler by age, and in mild seasons will continue in succession from the end of October to the second week in January. It acquires the name of Old from being the first China chrysanthemum that came to England in Modern times, and bloomed at Mr. Colvill's nursery, in Nov. 1795, but was said to be at Kew in 1790. The great horticulturalist Miller certainly had one, or more likely two, of these Chinese or Indian chrysanthemums, in cultivation at Chelsea long before; but it is not yet quite satisfactorily explained what sorts they were. See *Hort. Trans.* v. 4. tab. 12. p. 326. and following.
41. *The Changeable Tasseled White; The Changeable White*, Hort. Trans. v. 4. p. 336. and v. 5. p. 419., and Bot. Mag. tab. 2042. It has also been called the Old White, being the first white-flowered variety known in our gardens. It is recorded in the Hort. Trans. to have been raised from a sporting branch of the preceding, and indeed, resembles it in every thing but color. It is a very graceful and elegant plant, and in warm situations its flowers are often more or less tinged or dotted with purple or blush color.
42. *The Narrow Quilled White; The Quilled White*, Hort. Trans. v. 4. p. 337. and v. 5. p. 419. This rather slender variety is almost of the middle size, and has the slenderest and most completely quilled florets, and the earliest flowers, of the whole group, which hang in gracefully droop-

ing tassels, and form a strong contrast to the next in almost every respect.

43. *The Great Tasseled White; The Tasseled White,* Hort. Trans. v. 4. p. 339. and v. 5. p. 420. Has also been called the expanded White. This large, strong and broad, deep-green, shining-leaved variety is one of the latest of all in blooming; but its lovely flowers are larger and more showy than those of any white-flowered variety, and endured to the end of January, 1833, the date of the present paper. No flower in this chilly climate stands the cold so well, or so long continues to beguile the fancy of a florist by its protracted opening, by its hardihood in expansion, and by the soft hue of its snowy blossoms; carrying on, as it were, the flowery beauty of lingering autumn into the very bosom of winter, whose ice at length closes the temple of Flora for a time, until the herald flowers of spring appear amidst the melting snow, as if impatient of delay.

****** HALF-DOUBLE TASSEL-FLOWERED; with only half-double flowers, and narrow elongated quilled petals; often drooping and somewhat resembling a tassel.

44. *Half-double Quilled White; Semidouble Quilled White,* Hort. Trans. v. 5. p. 158. A very tall robust variety. The flowers are among the latest varieties, and more inclining to be single than usual, yet of too late occurrence to ripen seeds with us. They are very large, and the narrow-quilled petals are very singularly waved, and as if pursuing each other from right to left, making a pleasing and almost animated appearance.
45. *Half-double Quilled Pink; Semidouble Quilled Pink;* Hort. Trans. v. 5. tab. 17.* (inferior figure) p. 157. and v. 5. p. 422. and v. 6. p. 351. This variety grows rather tall, and flowers latish, but its flowers, although but half-double, and only of the middle size, possess a degree of graceful elegance and lovely hues peculiarly their own. It is at present a rare variety.
46. *Half-double Bronze Buff; Pale Buff,* Hort. Trans. v. 6. p. 334. Also called the Semidouble Pale Buff, and Reeve's Pale Buff, and Quilled Buff, and the Buff. It is a very tall and free-going variety, and its half-double buff large flowers, which in their early stages are much bronzed, though of coarse hues make a showy appearance, and stand the weather better than all others, opening rather early, and continuing late until all the bronze is gone, having faded to a dull buff.
47. *Half-double Quilled Orange; Semidouble Quilled Orange,* Hort Trans. v. 5. p. 412. and p. 422., and v. 5. tab. 17.** (left-hand figure), and v. 6. p. 352. A tallish plant with but few large and almost single, and also some nearly half-double, flowers, of good size, but making a poor show.
48. *Half-double Pale Quilled Orange; Semidouble Quilled Pale Orange,* Hort. Trans. v. 6. p. 337. Also called Semidouble Deep Yellow. Of the middle stature, with few and late flowers, of good size, but comparatively poor appearance, on loosely dropping foo.stalks.

Obs. The author has rejected the hybrid word *semi*-double throughout the paper.

REVIEWS.

Art. I. *The Gardener's Magazine, and Register of Rural and Domestic Improvement.* Conducted by J. C. Loudon, Esq., F. L. S. H. S. &c. In Monthly Numbers, 8vo. 1s. 6d. each. No. LVIII. for January.

The number for January, 1835, of this excellent Magazine, appears with several improvements. Under the head of Pomological, Abhorticultural, Floricultural and Olitorial Notices, the indefatigable conductor intends to furnish his readers with an account of all new and choice fruits, rare shrubs and trees, new flowers and new vegetables, worthy of cultivation in the fruit garden, pleasure ground, flower border, or kitchen garden. The conductor has made such arrangements with Mr. Thompson, of the London Horticultural Society's Garden, and Mr. Barnet, of the Horticultural Society of Edinburgh, as will enable him to give all the information possible on these subjects.

The first article is a "brief account of Mr. Colley's Botanical Researches in Guiana," by James Bateman, Esq., who sent Mr. Colley out to collect Orchideous plants. To those of our readers who are interested in reading some of the peculiarities of plants, we extract the following, as showing the habits of that singular tribe generally termed Epiphytes:—

> "I shall now attempt," says the writer, "to convey some idea of the aspect of vegetation on the banks of the Demarara; which, though not so large a stream as the Essequibo, Massaroni, Corgooni, Berbice, and other rivers which were afterwards visited, partakes more or less of the characters of them all. The forest (or, as it is there called, "the bush") usually hangs over, or approaches near to, the stream; and, to a European eye, wears a rich but rather monotonous aspect; relieved only by the "crowned heads" of the majestic palms, or the broad-spreading foliage of the banana. If we except the "silk cotton tree," the trunk of which is found of prodigious diameter, the trees are not usually of very large growth: indeed the redundance of vegetation, while it contributes to the denseness of the forest, must naturally have a tendency to diminish the size of the individuals of which it is formed. The "bush rope," and many splendid climbers hang in light and elegant drapery round the higher parts of the trees; while their trunks and lower branches actually bristle with the various species of Tillándsiæ, *Orchídeæ*, *Aröideæ*, and ferns, among which the right of "tree room" is divided, the Tillándsiæ having the largest share. Epiphyllum speciòsum is also found growing as an epiphyte, but has never a vigorous appearance.
>
> "Flourishing as the various epiphytes appear, and securely seated as they seem to be out of the reach of harm, there is, nevertheless, a war of extermination continually going on among themselves, as violent as that of the wild beasts which rove beneath their feet. The seed of an orchideous plant vegetates on some naked portion of a tree; pseudo-bulb after pseudo-bulb is formed, and the plant in time arrives at maturity, and begins to bloom; presently, a rapidly spreading fern advances up the branch, and fixing its un-

relenting stolones among the clustered pseudo-bulbs of the orchideous plant, literally tramples it beneath its feet. Next comes the seed of some huge Tillándsia, which, germinating among what you may almost term the "fur" of the fronds and base of the fern, thrusts its wire-like roots into its very vitals, and soon raises over its head a pyramid of prickly leaves. Perhaps, too, while in the height of its glory, the tyrant Tillándsia may itself feel the strangling grasp of a "bush rope;" and thus, in its turn, be driven from its station. Such is the kind of vegetable retribution which is always going on, in damp, tropical forests, among a tribe of plants, which, indeed, form noble substitutes for the mosses and lichens which assume their places in our own woods. It might be expected that, where such numerous epiphytes flourish, moss would also be found in abundance. The reverse, however, is the case: scarcely a handful could be collected in a day; and, when observed at all, it is generally found extending, in a narrow strip, from the trunk to the branches. This scarcity of moss is severely felt by the botanical collector; for it forms, in a dry state, by far the best substance in which *Orchideæ* and many other plants can be packed. I would, therefore, recommend any future collector, who may visit these countries, to carry out with him a quantity of dry moss; of which a large supply may be pressed into a very small compass; so small, indeed, that the room it would occupy, in the passage out, need not at all be taken into consideration.

"*Orchideæ* being, as I have already mentioned, the principal object of Mr. Colley's expedition, I will here bring forward a few particulars which I have gathered respecting their habits, &c. &c. They are by no means scattered in every direction, or on every tree; but appear very capricious in their choice of situation. A river may be ascended for twenty miles without an orchideous plant being seen; while, on a sudden turn of the stream, every tree becomes covered with them: yet they do not appear to have a favorite aspect; for on some of the rivers which Mr. Colley visited, he found them exclusively on the northern exposure, while, on others, they occupied the southern. The situations in which they are most usually found, are those parts of a forest where old and broken wood occurs, or on the skirts of the savannas. These savannas are large open breaks in the woods, covered with fine white sand, which has, at night, the appearance of snow. They contain, also, many low and stunted bushes. The *Orchideæ* seem to like an airy and exposed dwelling-place; being found on the more prominent parts of a tree, and not in the shade, as is generally supposed. Mr. Colley only found in one instance an orchideous plant in the heart of a forest; and this was growing on the prostrate trunk of a tree, so rotten as to fall to pieces when pressed with the foot. This plant is expected to prove of an entirely new genus. In the large river Berbice, the *Orchideæ* were seen seated on the summits of such high trees that it was necessary, in order to get possession of them, to cut down the trees on which they grew. What would be thought, in this island, if a person were to cut down a tree to bring him within reach of a weed? for in no other light are these glorious plants regarded abroad, which here actually sell for five, ten, or even fifteen guineas apiece. It may be asked, "Why not climb the trees?" This is quite out of the question; for they swarm to such a degree, with the great black ants, scorpions, and snakes, that nothing would induce even an Indian to venture to ascend them. The plants themselves, when torn from the tree, require very dainty fingering, being frequently made the lurking-place of some scorpion, or of a nest of these fiery ants. The best way is to plunge them instantly into water, which either drowns or ejects all these dangerous lodgers.

"For the benefit of future collectors," Mr. Bateman says, "I must warn them against the use of an Indian-rubber cloak in a tropical country; for the heat of the sun soon melts the preparation, which, of course, not only ceases to exclude the wet, but glues itself to the skin.

"It now only remains for me to add of Mr. Colley, that though often exposed to the drenching dews of night, in a hammock slung between two trees, and though harrassed by privations in every form, still such was his iron constitution, that during the whole five months of his stay, he enjoyed the most perfect health."

In Article XV. under the head of Pomological Notices, we find the following account of a new Peach, by Mr. Thompson:—

> "*The Pêche de Sernach* is the name of this fruit; and it was received, by the Horticultural Society, from M. Audibert, nurseryman at Tarascon (département des Bouches du Rhône.) It fruited for the first time, last season; and is a very fine large melting late sort. In the garden of the Society there are many *hundreds* of new sorts of fruit that are now coming into a bearing state; and, among them, some *tens* may probably be found excellent. These the public will have an early opportunity of knowing and procuring, as soon as their merits are ascertained, in consequence of the arrangements you have made with a view to that end."

As new fruits, deserving of trial in England, Mr. Thompson recommends the following American varieties. Apples:—Benoni, Early Bough, (*Coxe*), St. Lawrence, (*Corse*), Corse's Indian Prince, (*Corse*), Killam Hill, Hubbardston Nonsuch, Rawle's Janett, and Striped June apple. Pears:—Dearborn's Seedling, Cushing, (*S. Downer, Esq.*), Dix, (*S. D., Esq.*), Gore's Heathcot, Wilkinson, (*S. D., Esq.*), and Lewis, (*S. D., Esq.*) Plums:—Bleeker's Gage, Huling's Superb, Blue November Gage, and several of Mr. Corse's varieties. All these are described from Mr. Kenrick's American Orchardist. Their excellence will be proved in the London Horticultural Society's Garden, at Chiswick, and their merits made known through the Gardener's Magazine.

For a collection of Pears, where the space is limited, Mr. Thompson recommends the following:—

> "Jargonelle, Maria Louise, Beurré de Capiaumont, Beurré Diel, Glout morceau, Easter beurré, Beurré rance. These are all of first-rate excellence, deserving the protection of walls, where such can be afforded; but, with the exception of the jargonelle, they are all hardy enough for standards, in any climate tolerably good as regards the growth of this class of fruits. It would be difficult to select fewer sorts than the above; because some might prefer a sort which would come fit for use in autumn, others in winter or spring. Several sorts may, however, be worked on the same tree, where the space will not admit of one of each being planted. For instance, the Beurré de Capiaumont is such a great and constant bearer (nothing to the contrary has been observed of it since it first began to bear in this country), that a whole tree would be more than sufficient for a small demand; it might, therefore, be partly worked with Glout morceau or Easter beurré. It may be farther remarked, that the Beurré Diel requires to have the branches kept rather thin, as otherwise, its large and abundant foliage becomes too dense for the admission of the sun and air to the fruit."

Under the head of "Olitorial Notices," some new vegetables are mentioned. A new Pea, called the *D'Auvergne Pea*, is said to be excellent. It was sent to the London Horticultural Society, by M. Vilmorin, of Paris. Seeds of vegetables and flowers ripened exceedingly well in England, last season.

ART. II. *The Floricultural Cabinet and Florist's Magazine.* Conducted by JOSEPH HARRISON. In monthly numbers, 8vo. London, No. XXIII.; January, 1835.

THIS is a very interesting little work, and contains much information for the florist. The work has already reached two volumes, and this number is the commencement of the third. We shall occasionally review the work, extracting such matter as we think will add value to our Magazine.

The first article is, "on the impregnation and raising of the Carnation and Pink from seed." In this the correspondent gives the following as his mode of proceeding:—

> "I select such flowers as are perfectly double, and I know of none better than the following:—Roi de Capuchins, s. b.; Wood's William the Fourth, c. b.; Addenbroke's Lydia, s. f.; Lancashire Lass, r. f.; Turner's Princess Charlotte, p. f. In Picotees—Hufton's Will Stukely, r. p.; Annesley's Achilles, r. p.; Hufton's Miss Willoughby, p. p.; and Jeeve's Moonraker, p. p. That such flowers as these may produce seed, it will be necessary to let every bud remain to bloom. When they are fully expanded, and the pistils assume a glittering icy appearance, take any one half-expanded bloom, and tear it open, when will be seen the apices, or pods, containing the pollen, or dust: take one of these, and, if not already burst, open it, and draw it along the pistils, till you see some of the powder adhering to them. If this has been properly done, the bloom will close in two or three hours; and if no alteration takes place, repeat it till it does. In two or three days after impregnation has taken place, cut off all the other buds, and remove the plant to a situation where it will get plenty of sun; keep it well supplied with water, and protect the capsule from rain, by placing a square piece of thin board upon the stick, just above it; gather the seed when ripe, and keep it in the pod in a well-corked vial. It will be also necessary to protect the pod from earwigs, which is best done by winding a little fresh sheep's wool round the stick and stem; they will not attempt to pass over it, as it entangles them.
>
> "These directions apply equally as well to Pinks, with the exception that the bloom from which the pollen is to be taken must be opened before it begins to expand, or the apices will all be burst, and the pollen gone."

Article 3 is "on the Blooming of Double Stocks in Pots." "It is commonly known," says the writer, "that innumerable quantities of plants of the Scarlet and White Stock are annually bloomed in pots; but the difficulty which occurs in procuring strong blooming plants in pots, without the aid of a green-house, has rendered the system somewhat unpopular with many amateur florists, who naturally dislike to see a degenerate growth, and an indifferent bloom in pots, after witnessing the handsome appearance which they present in their flower-beds and borders."

In order to cause vigorous plants to bloom, the writer directs "the seed should be sown in a frame late in autumn, giving the advantage of all mild weather, but closing the lights at night, and affording sufficient protection of matting during the severity of winter. Some are sown as late as Christmas, weather permitting. The seed sown in spring will never produce plants so early, if so fine, as the autumnal sown plants.

"The soil best suited to the Stock appears to be a rich, light, sandy loam, moderately manured with old frame-dung, well incorporated together; or if a heavy strong loam is used, a good portion of sharp grey sand should be united with it, manuring it with old frame-dung, as above.

"As soon as the plants appear sufficiently advanced in growth to be drawn from the frame, which is when about an inch and a half in height, and before they run at all weakly, I prick them out on a bed of compost prepared as above, observing, in dibbling the plants in, to let the roots be tolerably firm-fixed in the ground, leaving the little hollow on one side of each plant caused by the action of the dibble, which allows the young plants to receive and retain a greater degree of moisture, a desideratum at this precise time most important to their existence, and which is always mainly instrumental in their success. Should the weather be dry, occasional waterings between the rows with a fine rose pot must be given. It is an additional advantage to afford night covering with mats, by means of hoop-bends, at this early season, until the plants are re-rooted and established; for, notwithstanding the Ten-week Stock partakes of the character of a hardy annual, we must avoid exposing them to unseasonable severity; or, as in the case of infancy in ourselves, we may crush that life which might otherwise have matured, and adorned society.

"I let the plants remain thus until they are set for bloom, and the young buds are sufficiently developed to enable me to distinguish the "double" from the "single" plants, which is easily done, the double presenting a round, knobbed, full appearance, altogether different from the single. The distinction in the first or early show of the bloom will readily suggest itself to the most uninformed on the subject. I then select such of the double plants as I require for potting, and carefully remove each with a strong rounded garden trowel, which I do without in the least disturbing the root, taking up each with a good ball of earth attached. I place one strong looking plant in the centre of a 48-sized pot, filling up the pot with a compost similar to that above described; or I place three plants triangularly in a 36 or 24-sized pot, and settle the plants moderately firm. I then place them in a shady situation until well re-established.

"From this transplanting I keep the pots supplied with a regular moisture, preferring evening watering, which revives the plants after the exhaustion occasioned by the effect of the sun. They succeed best when the season is moderately rainy. If the plants are at any time suffered to droop for want of moisture, they will never succeed, and the hopes of the cultivator will be blighted.

"By the foregoing method, which I have adopted with the utmost success for several seasons, I have bloomed the scarlet and white varieties in pots, in a degree of perfection and beauty which I really have not been in the habit of observing elsewhere, and which I feel confident can never be acquired by the simple methods resorted to by persons generally, without the assistance of the green-house; and the Stocks which are sent out for sale in bloom early in the season, having just emerged from the tender care and skill of the most eminent nurserymen in the suburbs of London, will be sure to contain many single flowers; and when purchased, and their situation consequently changed, they are doomed but to a transient existence.

"I have transplanted many hundreds in this manner, and rarely or ever had one die; they seldom flag at all perceptibly, and even then but for a few hours only. As such I respectfully beg to recommend the adoption of the plan, of course at the same time strongly urging the necessity of a similar care and attention to what I have here described.

"I have had them in bloom in May, and with their lateral shoots throughout the summer."

MISCELLANEOUS INTELLIGENCE.

Art. I. *General Notices.*

The extreme Fibrils of the Roots of Plants, it has been asserted by Duhamel and others, die annually in the winter season, and are renovated in the spring in the same manner as leaves. Mr. Knight admits the position to be true in regard to the fibrils of bulb roots, but denies it in regard to the fibrils of the roots of trees. To ascertain the point, the Rev. P. Keith took up portions of the roots of different plants, chiefly trees, at different seasons of the winter, and, as a result, he concludes that "the root is never wholly denuded of its fibrils or spongioles, as the branches are denuded of their leaves. A partial decay, with a partial renovation, of these organs, seems to be occurring at all seasons; but a total denudation of the root occurs at no season. If, with Mr. Knight, we admit of a total denudation of bulbous roots, I think it will not go beyond such as are taken up out of the soil for the winter; for, if the bulb is allowed to remain in the earth, it is to be believed that new fibrils will have begun to be protruded before the old ones have finally decayed."—(*Phil. Mag.*, third series, v. 211.) Mr. Keith appears to have been the first to discover that vegetating roots do not receive their increments of length solely by the extreme points. Professor Lindly has since confirmed the experiments of Mr. Keith, which were made so long ago as 1819.—(*Ibid.* page 208.)

Art. II. *Domestic Notices.*

New Potatoes, Convòlvulus batàtas. L. Paubell, Esq., of New Jersey, has communicated the following letter to Messrs. Wm. Prince & Sons, of the Linnæan Botanic Garden, Flushing, L. I.:

Gentlemen:—I have this day sent to Messrs. Swords, Stanford & Co. with a request to forward it as soon as possible, a small box, containing four roots, received from Martinico, by Mr. L. du Bereau, a gentleman of this place, as a species of the Convòlvulus Batàtas, the specific name of which I am ignorant. They were recommended to him as superior to the common sweet potatoe; when boiled, they are harder than the Carolina kind; *le gout tient un peu de celui de l'igname.* The root, it is said, will keep sound a whole year in the West Indies; those sent have been dug these four months. They do not require a longer time to come to maturity than is necessary for the maturity of the kind cultivated with success in the lower part of this State. The foliage is a very good fodder, and is used as such in Martinico and Guadaloupe.

I think the introduction of this variety of potatoe in the United States, where it is, I believe, entirely unknown, may be a very great advantage; and should the heat in this latitude not be great enough to bring it to perfection, there is no doubt but that its culture in the southern States will be attended with the success it has had in the West Indies.

The possibility of introducing, through your means, a new vegetable into this country, is the only apology I can offer for the liberty I take of requesting you to give a trial to its culture, in hopes that you will be successful in the attempt.—*N. Y. Farmer.*

III. *Quincy Market.*

Roots, Tubers, &c.	From $ cts.	To $ cts.
Potatoes:		
Common, per barrel,	1 00	1 87½
Common, per bushel,	40	50
Chenangoes, per barrel,	1 25	1 50
Chenangoes, per bushel,	50	60
Eastport, per barrel,	1 75	2 00
Eastport, per bushel,	75	1 00
Nova Scotia, per barrel,	1 25	1 50
Nova Scotia, per bushel,	40	50
Turnips:		
Common, per barrel,	75	1 00
Common, per bushel (washed)	40	50
French, per bushel,	50	
Onions, per barrel,	2 50	3 00
Onions, per bushel,	1 00	1 25
Onions, per bunch,	4	6
Beets, per bushel,	70	80
Parsnips, per bushel,	70	80
Carrots, per bushel,	40	50
Salsify, per dozen,	25	37
Radishes, per bunch,	8	12
Horseradish, per pound,	10	20
Garlic, per pound,	15	20
Cabbages, Salads, &c.		
Cabbages, per dozen heads:		
Red,	75	1 00
Savoy,	50	75
Drumhead,	75	1 00
Brocoli, per head:	none.	
White,	none.	
Purple,	none.	
Cauliflower, per head,	none.	
Celery, per root,	none.	
Lettuce, per head,	6	12
Spinach, per peck,	33	37

Squashes and Pumpkins.	From $ cts.	To $ cts.
Canada, per cwt	none.	
Common crook-neck,	5 00	6 00
Lima,	3 00	4 00
Pumpkins, each,	none.	
Pot and Sweet Herbs.		
Parsley, per half peck	50	
Sage, per lb.	20	30
Marjoram,	50	
Savory,	25	37
Spearmint,	80	
Fruits.		
Apples:		
Baldwins, per barrel,	3 00	4 00
Baldwins, per bushel,	1 50	
Pearmains, per barrel,	3 50	4 00
Pearmains, per bushel,	1 50	2 00
Russetts, per barrel,	3 00	3 50
Russetts, per bushel,	1 50	1 75
N. Y. Pippins, per barrel,	3 25	3 75
Pears:		
Iron white, for baking, per barrel,	5 00	
per bushel,	2 00	2 25
Sweet baking, per bushel,	none.	
Old St. Germain, per dozen,	none.	
Quinces, per bushel,	"	
Cranberries, per barrel,	10 00	
Cranberries, per bushel,	3 00	4 00
Grapes, foreign, per pound,	none.	
Pine Apples, each,	25	50
Oranges, per hundred,	1 00	1 50
Lemons, per hundred,	75	1 00
Chestnuts, per bushel,	3 50	4 00
Walnuts, per barrel,	4 00	4 50
Walnuts, per bushel,	1 75	2 00
Almonds, per pound,	12	14
Filberts, per pound,	4	6
Castana, per pound,	4	6

REMARKS. Since our last report, there has been but little variation in the prices of the principal articles. Potatoes have advanced a little, but not enough to make any alterations in our quotations. The continuance of the cold weather, so uncommon in the month of March, has prevented the arrival of the usual spring supplies from the eastward. Onions continue scarce, and are in much demand, and prices have increased considerably. Radishes are more abundant and of much better quality than those brought in last month. Cabbages continue scarce, and very few of good quality are to be had—fine heads of the Red Dutch, command high prices. Of Broccoli and Cauliflower there are none in the market. Celery is nearly gone. What little remains on hand is of inferior quality. Lettuces are plenty, especially of the Early Curled Silesia. Spinach now comes in fine. Dandelions we have not named in our quotations, although a few small lots have been brought in; they sold very readily. Crook-neck Squashes are about done for the season. A few very fine ones, remaining in a few hands, command a high price. West India Squashes have been received the last week or two in considerable quantities, and sell at moderate rates. Apples have advanced a shade; Baldwins are nearly all gone. A few of very superior quality are held at prices much higher than our quotations. Cranberries are very scarce, and the quantity in the market very small. But few Chesnuts remain on hand, and those not very fair.

M. T.

Boston, March 20th, 1835.

ART. IV. *Massachusetts Horticultural Society.*

Saturday, February 21st.—Exhibited.—Eppes sweet, or Danvers Winter Sweet Apples, from R. Manning, Esq., Salem. Mr. Manning has exhibited the same variety before. It is a fine kind, and may be placed at the head of sweet apples.

From Thomas Mason, Charlestown—A fine bouquet of flowers, among which were Pæónia moután, Bánksii, Azàlea Smíthii and índica purpùrea, Caméllia pompònia, Corræa álba, Cyclamen pérsicum and còum, Verbèna chamædrifòlia, Sálvia fúlgens, Cinerària cruénta, Tea Roses, Primulas, Stocks, Geraniums, Polyanthus, Rosemary, &c. &c.

February 28th.—Exhibited.—A fine Hyacinth of the variety called Bouquet Tendre, or Waterloo. It had two spikes of flowers.

March 7th.—Exhibited.—A fine specimen of the Beurré de Aremberg Pear, from Mr. Cheever Newhall. It was very excellently preserved. Pigernett Apples, from R. Manning, Esq., Salem.

A bouquet of flowers from T. Mason, Charlestown; consisting of Rhododéndron arbòreum hybridum, Azàlea purpùrea and phœnícea, Prìmula prænitens, Sálvia fúlgens, Roses, Geraniums, Hoítzia coccinea, Stocks, Polyanthus, &c. By S. Walker, Roxbury—A pot of Anemòne hepática rùbra plèna, (very beautiful). Anemòne Tea Rose and Duc de Gramont, from Messrs. Winship, Brighton.

March 14th.—Exhibited.—A splendid bouquet of flowers from Mr. S. Sweetser, Cambridgeport—Composed of Pœónia moután Bánksii (a fine flower), Cyclamen pérsicum, Verbèna Aublètia, Alónsoa incisifòlia, Eupatòrium odoràtum, Phlómis fructicòsa, Hyacinths, Geraniums, Iris chinénsis, &c. Pelargònium Washingtònian, from Messrs. Winship.

Ròsa Bánksia var. álba and lùtea, from the conservatory of J. P. Cushing, Esq., Watertown.

From T. Mason—A fine bouquet; consisting of Caméllia myrtifòlia, atrorùbens, and ròsea plèna; Azàlea índica phœnicea, ledifòlia and purpùrea; Corræa álba, Illícium floridànum, Cyclamen pérsicum, Polyanthus, Geraniums, and the following varieties of China Roses;—Vanilla Tea, common Tea, undulata and Sanguinea.

From R. Manning, Esq., Salem—Conway Apples. This variety originated in Hamilton—considered very fine.

ART. V. *Notices of the Exhibitions of the Columbian and New York Horticultural Societies.*

The first Annual Exhibition of the Columbian Horticultural Society was held in the City Hall of Washington, on the 5th and 6th of June. A large and splendid collection of green-house plants, and a great variety of garden flowers, vegetables, and fruits, were brought from the different parts of the district to the hall of exhibition. The season having been very unfavorable, it was apprehended that the exhibition would disappoint public expectation; but such were the zeal and enthusiasm of the horticulturists, florists, and others of the district, that it presented, even on the first day, a spectacle of beauty and splendor that surprised all who saw it, and that was said to be unsurpassed, in variety and profusion, by any thing of the kind ever before seen in this country. The committee, to whom its superintendence was assigned, displayed great taste in its arrangement by the admirable grouping and disposition of the plants, and, assisted by several ladies of the city and its vicinity, who kindly lent their aid on the occasion, succeeded in rendering it a scene of enchantment. The green-house plants and the numerous garden flowers were arranged on pyramids, in different parts of the spacious hall and along the walls of the apartment, leaving alleys, through which the visitor passed to gaze on the beauties and inhale the fragrance that breathed around him. Two small floral pyramids were constructed and arranged in the most tasteful manner, by several ladies of the district, consisting of at least four hundred varieties of the choicest and most beautiful garden flowers, chiefly from the parterres of Mrs. Bomford and Mr. J. Peirce, and supporting a magnificent silver vase crowned with flowers. Glass globes, surmounted with bouquets of roses, lilies, pinks, &c., and containing goldfish, were placed in different parts of the hall. At night the spectacle was, if possible, still more splendid and enchanting; as lights, interspersed among the shrubs, tropical fruit trees, and groups of flowers, gave additional brilliancy to the scene. During the exhibition, on both days, the hall was crowded by visitors, and all seemed delighted at the first effort of the Society, which so far surpassed their expectations, and gave so fair a promise of future excellence and utility. The committee of arrangements are entitled to high praise for their assiduity, and for the taste and untiring zeal they displayed in making the exhibition so attractive and beautiful. The exhibition was closed on Friday evening, the 6th, by an address from George Watterston, Esq., Cor. Secretary. After recapitulating the heads of Mr. Watterston's discourse, the names of the principal contributors are given, and afterwards lists of eleven persons who received premiums for flowers of from three to ten dollars each; of six persons who received premiums for fruits, viz., strawberries, gooseberries, cherries, almonds, limes, oranges, lemons, and citrons, from two to ten dollars each; and of twenty-two persons who received premiums for esculent vegetables of from three to five dollars each. Among the exhibitors only four gentlemen's gardeners are mentioned. A number of ladies and some gentlemen exhibited flowers and fruits without any view to premiums. The committee regret that it is not in their power "to name all who contributed their share to that splendid profusion of garden and green-house flowers in the bowls and vases, and on the pyramids, with which the upper end of the hall of exhibition was so richly decorated; they can only add, to the list of the names already given, those of Mrs. Seaton, Mrs. Col. Towson, Mrs. Dr. Gunnell, Mrs. A. Suter, Miss C. B. Smith, Miss Watterston, Miss Wood, Miss Jones, and the Misses Barnard, among the ladies; and among the gentlemen, the Rev. Dr. Laurie, D. Munding, and especially Mr. T. Bates, who sent a profusion of very fine moss roses, and Mr. Bastian of Baltimore, and Mr. Camp, who sent some fine flowers, and for the purpose of ornament and variety, several globes of goldfish. The collection of lemon, orange, and other trees of the citrus family," the committee state, "was very large, and some of the specimens were very choice." Some of these trees were remarkable for their extraordinary size, fine form, and abundance of fruit. "The collection of geraniums was very extensive; it comprised nearly all the old and many of the new varieties, and was remarkable for size of flower and brilliancy of color." Among the more rare exotics were fine and very large specimens of Strelítz*ia* regìnæ, *C*ycas revolùta, *Laúrus Cámphora*, *F*ìcus elástica, *Thèa* víridis, *T. Bohèa*, *Nandìna* doméstica, *A*'loe, arboréscens, *A*. lingua, *A*. saponària, *A*. variegàta, &c. Epiphyllum *P*hyllánthus, E. speciòsum, Cèreus triangulàris, C. multangulàris, &c., Calceolària salviæfòlia; numerous large specimens of Agàve americàna, of both varieties, and of *Yúcca* gloriòsa. There were also plants of the pine-apple and aniseed, some very perfect specimens of the Monótropa uniflòra, of fine double-flowering white anemones from the neighboring woods, a musk plant in bloom, probably the first that every flowered in the district, and "from various private collections numerous splendid specimens of Epiphyllum speciòsum, in full flower." The committee speak in high terms of praise of the floral specimens, from the beautiful and extensive collections of Dr. M'Williams; Dr. J. S. Gunnell, the Society's botanical lecturer; Wm. Rich, Esq.; Mr. J. Peirce; Mr. Wm. Yates of Alexandria; Mr. A. Suter, and Mr. John Douglass.—*National Intelligencer.*

The following report of the Dahlia Exhibition, held by the New York Horticultural Society in October last, has just been published in the New York Farmer. Our New York Horticultural friends should not have waited till this late hour to publish the results of such a splendid and interesting display, as we infer it must have been, from reading the report. We have made such arrangements as, we hope, will enable us to give them in detail, as soon as possible after their occurrence:—

Agreeably to a resolution of the Society, passed at a former meeting, the Annual Exhibition of Dahlias was held at Niblo's Garden, on the 14th of October last, and was also continued for the two following days, viz. 15th and 16th.

The display of flowers was very great, considering the unfavorableness of the season, and that several persons residing but a short distance from the city had their plants destroyed, or the flowers so much injured by the frost that they could not exhibit them.

The following is the report of the committee:—

REPORT.

The Inspecting Committee of the New York Horticultural Society beg leave to report:—

That in accordance with the rules and regulations adopted at a meeting of the Society, held at its rooms, on the 11th day of September last, to be observed at the Exhibition of Dahlias to be given at Niblo's Garden, on the 14th, 15th, and 16th current, your committee proceeded to discharge the duty assigned it, of awarding the different premiums for Dahlias to the competitors for prizes; and after a strict, careful, and impartial examination, unanimously decided on the following distribution of the prizes:

The first premium, for the best six self-colored Seedling Dahlias, is awarded to Mr. Thomas Dunlap, and was designated by the Committee of Arrangements as No. 8.

No second premium is awarded—as no person has presented three variegated Seedlings, as prescribed by the rules and regulations above referred to.

The third premium, for the greatest and best variety of Seedling Dahlias, is awarded to Mr. John Popayan, of Bloomingdale, and was designated by the Committee of Arrangements as No. 9.

The fourth premium, for the best twelve self-colored imported Dahlias, is awarded to Mr. Thomas Dunlap, and was designated by the Committee of Arrangements by the letter E.

The fifth premium, for the best six variegated imported Dahlias, is awarded to Mr. Thomas Dunlap, and was designated by the Committee of Arrangements by the letter E.

The sixth premium, for the greatest and best variety of imported Dahlias, is awarded to Messrs. Shaw and Thorburn, and was designated by the Committee of Arrangements by the letter F.

Your Committee feels itself bound to award a discretionary premium to Mr. Wm. Reed, for the presentation of six beautiful self-colored Seedling Dahlias; which, but for non-conformity to the rules regulating the exhibition, would have been entitled to the first premium.

Many beautiful specimens for competition were exhibited, which were unavoidably passed over by your committee, in consequence of the non-observance of the rules by the gentlemen presenting them.

Liberal presentations of this magnificent flower were made by cultivators and amateurs, among which stood most conspicuous those offered by Messrs. Thomas Hogg, Michael Floy & Son, William Reed, William Neal, William Rushton, and Arnold & Hyslop; and your committee take leave to add, that a more splendid display of Floral beauty, in form, tint, and variety, never (in its opinion) greeted the eyes of an admiring audience in this, or perhaps in any other country.

The most extensive collection of beautiful new varieties was sent for exhibition, and not for competition, by Mr. George C. Thorburn, in which the Queen of the Dahlias stands unrivalled.

J. K. Hamilton, Chairman.
W. R. Cooke.
Benjamin McVickar,
John J. Palmer.

New York, Oct. 16, 1834.

The names of the flowers which obtained the premiums are as follows:

For the first premium awarded to Mr. Thomas Dunlap—Beauty of Bloomingdale, Bulow, Dunlap's King of the Yellows, Dunlap's Ranunculifora, Dunlap's Dwarf Yellow, and one not named.

Those for the third premium, awarded to Mr. John Popayan, were not named.

For the fourth premium, awarded to Mr. Thomas Dunlap—Widnall's Paragon of Perfection, Dennisii, Coronation, Widnall's Salamander, Hall's Palmyra, King of the Yellows, Queen of the Whites, Mountain of Snow, King of the Whites, Miss Pelham, Coccinea Speciosissima, and Surpasse Triumphe Royale.

For the fifth premium, awarded to Mr. Thomas Dunlap—Agrippina, Russell's Maculatum, Pygmea, Anna Boleyn, Levick's Incomparable, and Douglass' Augusta.

For the sixth premium, awarded to Messrs. Shaw & Thorburn—Lilac Anemone, Daniel O'Connell, King of the Whites, Levick's Commander-in-Chief, Galanthus, Pavonia, Scarlet Coronation, Lord Liverpool, Bona Dea, New Scarlet Turban, Achatus, Lady Fitzharris, Richardson's Blush White, Crimson Shaded, Doughty's Blush, Fulgida Perfecta, Barrett's Susanna, Agrippina, Widnall's Aurora, Penelope, Rose Vesta, Levick's Incomparable, Inwood's Dwarf Yellow, Inwood's Rival, Miller's Invincible, Striata, Doctor Franklin, Foster's Seedling, Douglass' Ricci, Anna Maria, Tricolor, Coccinea Multiflora, Queen of Wirtemburg, Rosea Alba, L'Amitie, Conspicua, Bernardiae, Russell's Maculatum, Golden Lotus, Columbine, Widnall's Chancellor, Picta, Neptune, Amanda, Anthonia, Colvill's Perfecta, Pulla, Landgravine, Lady Farnborough, Helene Striata, Miss Pelham, Douglass' Augusta, Widnall's Salamander, Melancthon, Richardson's Alicia, Queen of the Whites, Chef d' Ouvre, Purpurea Perfecta, Foster's Constantia, Queen of the Yellows, Scarlet Ranunculus, and Countess of Liverpool.

The flowers presented by Mr. Wm. Reed, for which a discretionary premium was awarded, were not named.

A large number of flowers were presented by the following persons, and among them were some most beautiful specimens:

Messrs. M. Floy & Son—Forty-two imported varieties, many of which were quite new, very fine and beautiful. Messrs. Floy would have exhibited a greater number of varieties, but unfortunately the Dahlias at their nursery, in Harlæm, were destroyed by the frost.

Mr. A. Arnold—Fifty-four imported varieties, many of which were new, and very beautiful; also, seven fine Seedling varieties, two of which were first rate flowers.

Mr. Thomas Hogg—Fifty-nine imported varieties, many of them new, and all of them very fine specimens; also, thirteen Seedling varieties, some of them remarkably fine and good.

Mr. William Rushton—Thirty-three imported varieties, all of them very beautiful specimens.

Dr. B. McVickar—Seventeen imported varieties, the greatest part of them new, very fine and beautiful specimens.

Mr. G. Davis—Eleven imported varieties, all of them very good specimens.

Mr. Wm. Neale—Twelve imported varieties, very fine specimens. These would have been entitled to the fourth premium, but for non-conformity to the rules.

Mr. A. A. Leggett—Seven fine Seedlings, and five fine imported varieties.

Mr. William Reed—Twelve imported varieties, all of them very fine specimens.

Mrs. Bostwick—Eleven imported varieties, all very good specimens.

Mr. A. Hyslop—Twelve imported varieties, all of them fine specimens, and three good Seedling varieties.

Mr. J. Johnson—Eleven imported varieties, very good specimens, and two good Seedlings.

Mr. H. W. Havens—Eight imported varieties, all very good specimens.

Mr. E. H. Warner—A number of very fine imported varieties.

Mr. G. C. Thorburn— imported varieties, many of them new, and all of them very fine specimens, especially the Queen of the Dahlias, which is unrivalled as a variegated flower. These would have obtained a premium, but they were not entered for competition.

The above comprises all the flowers presented for competition or exhibition; but Messrs. Hogg, Reed, Floy, and Neale, also furnish several hundred flowers for filling up the table, and the greatest part of these flowers were equally as good specimens as those presented for competition.

As it may be interesting to amateurs and growers to know the names of all the varieties presented, I will new subjoin the names of those not enumerated above, viz.—Tincta, Marchioness of Bath, Sulphurea Superba, Duchess of Kent, French White, Miller's Defiance, Splendida, Blood-Red Globe, Miss Wood, Widnall's Diana, Kentish Hero, Nova Rose Lilac, Blanda, Ne Plus Ultra, Grandeur Superbe, Precellentissimo, Lord Byron, Aurantia, Goliah, Maid of Bellevue, La Brilliante, Brown's Rose, Lass of Richmond Hill, Rising Sun, Imperiosa, Hall's Fiery Meteor, Guttata Major, King of Roses, Atro Purpurea, Involute Purpurea, Fulgida Nana, Prince George, Nubilum, Romulus, Groombridge's Matchless, Crimson Globe, Fairy Queen, Squibb's Pure Yellow, Metropolitan, Maria Louisa, Barrett's William the Fourth, Magnet, Superb Changeable, Theodore, Stephania, Foster's Incomparable, Alexandrina Victoria, Rudhall's Venus, Henry the Eighth, Widnall's Nonpereil, Veitch's Queen Adelaide, Fair Ellen, Dutchess of Richmond, Dawson's Victory, Parroquet, Star of Sussex, Royal Dwarf Orange, Queen of Belgium, Turner's Shaded, Lord John Russell, Golden Yellow, Douglass' Decora, Miss Dickson, Scarlet Turban, Queen of Roses, Royal Lilac, Hall's Mogul, Juno, Achilles, Helas, Miller's Lord Brougham, Miller's King Alfred, Fair Devonian, Juliet, Justinia, Albina, Miller's Mark Anthony, Nymphaeflora, Squibb's Elegans, Zelinda, Sir John Copley, Navarino, Miller's Eloise, Miller's Heroine, Man of Kent, Maid of St. Leonard's, Adeliza, Lady Sefton, Fulgida Superba, Phœnix, Grantchester Nonpareil, Sulphurea Alata, Windsor Castle, Hero Francaise, Painted Lady, and Gloriosa Rosea.

James Hogg, Sec. of Inspection Committee.

Art. VI. *Meteorological Notices.*

FOR FEBRUARY.

The weather during the month of February was cold and disagreeable; and much more variable than in seasons in general. A few days towards the latter part of the month were exceedingly pleasant. The Thermometer fell below zero twice. The mean temperature was nearly a degree lower than January.

Thermometer.—Mean temperature 21° 18. Highest 50°—Lowest 2° below Zero.

Winds.—N. eight days—S. E. one—S. six—S. W. four—W. five—N. W. four.

Character of the Weather. Fine four days—Fair eleven days—Cloudy thirteen days.

MONTHLY CALENDAR

OF

HORTICULTURE AND FLORICULTURE,

FOR APRIL.

FRUIT DEPARTMENT.

Grape vines that burst their buds the first of last month, will show their fruit clusters in a few days; air should be given plentifully, in all fine weather, and the vines syringed once a week towards the latter part of the month. Grape cuttings in pots, which were put in last month, will have made shoots five or six inches long. The heat of the bed should be kept up, that they may not receive any check in their growth. Tie each plant to a stick to prevent their being broken.

Strawberry beds, that were protected with leaves, &c., through the winter, should have the covering taken off, and the beds top dressed.

Grape vines, of foreign kinds, that were covered up during winter, should now be taken up and tied to the trellis or stake.

Peach trees. If it is desired to have peach trees in pots, young dwarf vigorous trees, free from the borer, should be procured, and set in large pots fifteen inches wide, and thirteen deep. Head in the tops, and they will make fine bearing wood for next season.

Grafting should be performed this month.

Trees planted this month should be mulched with rotten dung, to keep the sun from injuring their roots.

FLOWER DEPARTMENT.

Tulip and Hyacinth beds that were protected during winter, should have their covering removed. If severe frosts should happen after, a little hay or straw thrown over the bed, will be sufficient to protect them. The soil should be loosened with a trowel between the rows, and as the hyacinths proceed in growth, the spikes of buds should be tied to small sticks, to prevent their being broken by the wind.

Ranunculus roots may still be planted; but they will flower later, and not so fine as those planted the last month.

Annual seeds should still be sown in hot beds, and also in the open garden, if the weather is favorable. p. 101.

Dahlia roots should be separated, and each root, when wanted to flower early, planted in a small pot. p. 130.

Cuttings of green-house plants should now be put in, as they will strike more freely than during summer.

Tiger-flowers, *Amaryllis*, *Tuberoses*, and *Gladiolus natalensis* should be potted to flower early.

Pelargoniunus (Geraniums) should now be propagated; put several cuttings in each pot, and place them where they will receive but little sun until rooted.

Brompton and Queen stocks should be sown this month, where wanted to flower strong next season.

VEGETABLE DEPARTMENT.

Cucumber plants, that were hilled out in the frame last month, will now be in flower; they will require more mould to the hills and the heat to be kept up by additional linings. Give plenty of air, as the fruit swells, to give it a good flavor and color, and cut away all decayed leaves.

Broccoli and *Cauliflowers* may still be sown.

Celery seed may also be sown. Plant in a shady situation.

Carrots, *Onions*, *Beets*, *Parsnips*, *&c.*, should be sown this month, if possible. The new Scarlet Studley Carrot is a fine variety, and should be cultivated exclusively for the table.

Cabbage, *Cauliflower*, and *Broccoli* plants, that were raised in the frame last month, should be transplanted the latter part of this, into the open ground, selecting a warm situation for the early crops.

Sweet Marjoram should be sown the latter part of the month, as it vegetates much more freely than later, when the sun strikes more intensely upon the ground.

Radishes, where wanted in succession, should be planted every fortnight.

Peas, *Lettuces*, *&c.*, may be sown, and the kitchen garden work in general of planting, &c., done this month, if favorable weather.

THE
AMERICAN
GARDENER'S MAGAZINE.
MAY, 1835.

ORIGINAL COMMUNICATIONS.

Art. I. *Notices of some of the Gardens and Nurseries in the neighborhood of New York and Philadelphia; taken from Memoranda made in the Month of March last.* By C. M. H.

The remarks which we now make, will be principally confined to the appearance of the Hot-houses, Green-houses, and forcing departments in the various private and public gardens and nurseries, which we had the pleasure of visiting. The unfavorableness of the season, together with the short space of time which it was in our power to devote to the purpose, prevented us from calling at many fine residences and nurseries, which we should be exceedingly happy to include among those, which we now have the opportunity to lay before our readers. Our remarks will not, probably, be as interesting to many of our readers, as if made at any time during the summer season, or when the general appearance of the country scenery, together with that of the flower garden and pleasure grounds, kitchen garden, &c., would present so much worthy of particular note.

The present state of gardening around New York and Philadelphia, is highly gratifying to every lover of Horticulture; but that Boston and its vicinity excel in a somewhat advanced degree, is too generally admitted to need farther mention at this time. In floriculture, however, if we are not before our friends in New York, we are behind those in Philadelphia. This of course would be naturally expected, as the latter place was the residence of many of the great Botanists, who have explored the vast tracts of our country, to collect together the rich and beautiful treasures of Flora. The garden now owned by Mr. Carr, was established in the early part of the last century, when no other then existed, except one in Virginia. Here was collected together, by the celebrated naturalist, John Bartram (the elder), nearly all the indigenous plants and trees of North America, the superb specimens of which, at this day, stand unrivalled in any part of the country.

The second green-house erected, was that by Professor Barton, and is now owned and occupied by George Pepper, Esq. It was in Philadelphia that Pursh made his collection of the American Flora. Other botanists have made this place their residence, and have thus collected together plants from all quarters of the globe. The specimens of tropical plants are extremely rich, and embrace some of the largest and finest in the country.

The flourishing state of floriculture will be quickly perceived on visiting the various establishments in the city and neighborhood. If a great zeal for plants is not so much apparent among their amateurs, as with ours, the desire for plants and flowers appears to be more general, and especially for more choice and rare kinds. The exhibitions of the Pennsylvania Horticultural Society, have been of the highest character, and have also been attended with great success. In their premium list for the coming season, they offer *eighty-eight* prizes.

One great obstruction to a richer collection of plants in our green-houses, and to a greater advancement in floriculture in our vicinity, is the general cultivation of a large number of plants, by many individuals, who are not strictly nurserymen or gardeners. These every year, are sold in quantities, at low prices, which materially injures the business of the nurseryman, who makes it his sole purpose to propagate and grow plants, as his stock is often left on hand, being unable to compete with gentlemen who only wish to dispose of their plants, to pay the expenses of their green-house through the winter. This evil our friends at the south are free from, and their fine collections and ready sales, give full proof that it is one, which is not only very injurious to the nurseryman and florist, but exceedingly prejudicial to the progress of Floriculture.

We cannot refrain from here returning our thanks to the proprietors of the various gardens which we visited; they having, with great kindness, permitted us to make any remarks we might deem proper in relation to them. This we mention more particularly, as we believe some dissatisfaction was found with our remarks on the gardens and nurseries in our vicinity. We shall ever endeavor to pursue one course, and if permitted to mention any place, we shall do it in such a manner, as in our humble judgment we think the appearance of things demands.

We commence with the gardens, &c., in Philadelphia and neighborhood.

Lemon Hill, country residence of Henry Pratt, Esq.—This fine place is situated on the Schuylkill river, a short distance from the celebrated Fairmount water works. The range of hot-houses and green-houses, is about two hundred and twelve feet in length, and is divided into six compartments; or rather, they are additional houses, built on since the erection of the first. It has been said in a report of the gardens in the vicinity of Philadelphia, that this was the best kept garden in Pennsylvania; and that the green-house and hot-house department was unrivalled in the Union. We cannot attest to the former, as we have not had the pleasure of visiting it during the summer season; but of the latter we can, without exaggeration, say, it is the finest we have ever seen. We found Mr. Pratt's gardener, Mr. Mackenzie, a very intelligent young man, and from the appearance of things, well skilled in his profession. He very kindly promised to give us any information in his power, and we have no doubt our readers will be gratified with his remarks.

The range of houses has not a very favorable appearance upon approaching them. The largest one is built in the old style, with upright sashes or large windows in front, and with a dark roof. The others have been built up on each side of this, without much regard to proportion or beauty, and they consequently present an uneven and broken front.

We do not know how long these houses have been erected, but we have no doubt if Mr. Pratt shall ever have cause to rebuild them, he will do so with as much splendor as any thing of the kind in the country. There is no place where such an ornament would add more beauty, and no collection of plants more deserving of such a habitation, than Mr. Pratt's. The large upright house is filled principally with the different species and varieties of oranges and lemons—among which, are some of the very largest species. These we have understood Mr. Pratt disposes around his grounds in such a manner, in the summer season, as to make a complete grove of this grand tribe of plants; the highly odoriferous fragrance of their flowers while in bloom, is delightfully agreeable.

On entering the first compartment of the range of houses, the object which particularly struck us, was a large plant of the Vibúrnum tínus, with hundreds of cymes, of its beautiful white flowers, just expanding; this is a common green-house plant, and in England is extensively used for hedges; but it is deserving of a place in every collection. Passing through the orangery which we have just mentioned, we entered another compartment, which is used as a green-house; in this we saw several fine Camèllias, though of the more common kinds. Mr. Pratt's collection of Camèllias is, however, quite small, compared with his other plants. We here observed some of the finest flowers of the old red, or Grevell's red, we have ever seen; this variety, when flowered strong, still holds its quality as a showy kind. We here also saw the shaddock, some of the fruit measuring *seven* inches in diameter; a fine specimen of the mandarin orange; the Birchélla capénsis, and other plants, but too numerous to mention particularly. In the next compartment, which is the entrance to the houses in front, and which is quite small, we noticed fine plants of the Mímulus Smíthii and variegàtus in bloom; both grown from cuttings which had been struck only seven weeks previous to the time we saw them; the former was a foot high. Mr. Mackenzie informed us that they were potted in a soil almost similar to the one recommended by us, (p. 21); and thinks that if our observations are followed, the plants will bloom very strong. He placed the pots in a small cistern of water, where a few gold fish are kept, and to this circumstance he accounts for the strength of the plants. In the garden of the London Horticultural Society at Chiswick, where the ròseus and some other species were first introduced, they are grown around the edge of a small pond, and their singular shaped flowers and brilliant colors, continue to be produced throughout the season. We would suggest the keeping of a pan full of water under the pots of these plants, where they cannot be treated as just mentioned.

We now passed into the fifth house, which is used as a dry stove or hot-house. We here saw very large plants of the coffee tree (Coffæa arábica), full of fruit; several Justicias had been finely in flower; six or eight varieties of the Chinese Hibiscus (Hibíscus ròsa sinénsis), had been profusely blooming during all the winter. H. mutábilis (?), with flowers very similar to the vesicàrius, was full of blossoms. There were here five or six plants of the Euphórbia Poinséttii (?), as it has been called; all of which were displaying their large, magnificent scarlet bractes. Our readers probably recollect the notice we made (p. 70) of a plant of the same species which flowered in the hot-house of J. P. Cushing, Esq., at Watertown. We believe Mr. Pratt has more plants of this Euphórbia than are to be found in any other collection; a gigantic plant of the E. hexagònus, growing in the border, reached nearly to the top of the house; it has been planted nineteen years; one of the Cytisuses was flowering beautifully. The next and last house of the range, was also filled with tropical plants; the Mùsa paradísica (Banana tree), we here saw, with both flowers and fruit; on which we counted upwards of fifty, some of which were nearly ripe. Here was also the Gauva, Cherimoya, Plàntain, &c. A very large plant of Fícus bengalénsis, was loaded with fruit; Marànta zebrína was flowering elegantly. We might fill pages with the many fine plants that we observed, but we hope, at some future opportunity, to be able to describe them at greater length.

On leaving the hot and green-houses, we walked through the forcing ground. Mr. Mackenzie had cut asparagus previous to our visit; he had potatoes just breaking the ground in the frames; his cucumber plants were just showing blossoms, and looked uncommonly healthy, considering the extremely unfavorable weather of the past winter; the lettuces in the frames were heading finely. We were highly pleased with the neatness and appearance of every thing about the houses and forcing grounds; neatness in the latter is too little attended to at many places, and oftener presents more the appearance of a manure yard, than the forcing department. We had not time to look at any part of the pleasure grounds, and we left highly delighted with our visit.

City residence of George Pepper, Esq.—We are indebted to the kindness of Mr. D. Landreth, jr., for the pleasure of an acquaintance with Mr. Pepper. It is gratifying to see such a beautiful place as Mr. Pepper's in the very heart of the city. His garden fronts on Chesnut street, and is laid out with much taste. The green-house was the first one erected in Philadelphia, (as we have before stated,) and is combined with a hot-house. Mr. Pepper's collection is quite unique, and the number of plants which he grows in his green-house is, we believe, upwards of twenty-five hundred. They were very much crowded together, presenting one mass of foliage and bloom. He intends enlarging it this season to nearly twice its present size.

Mr. Pepper's collection of Camèllias is very excellent. He cultivates above twenty-five varieties, among which are three or four large double whites, which were covered with their lovely flowers. We here saw a fine specimen of the Blètia Tankervìlleæ. It had three spikes, with eight or ten of its splendid flowers in full bloom. In the centre of the house, towering above the other plants, stood a magnificent plant of the Magnòlia conspícua, profusely covered with its exquisite flowers; it was, we believe, the first ever brought into the vicinity of Philadelphia. Here was also a fine Mandarin orange, a large Yúcca arbòrea, and a large plant of the Magnòlia pùmila. In the hot-house department, which is raised on a stage at the upper part of the green-house, running the whole length, but separated from it by a partition, we noticed some fine specimens of tropical plants; among others was the Píper nígrum, (common Pepper,) the Fícus bengalénsis, elástica and religiosa; a fine plant of the Latània borbónica, (Bourbon plum,) and the Pandánus spiràlis. Mr. Pepper is quite an amateur, and his green-house displays much taste in the arrangement of the plants.

Residence of J. B. Smith, Esq.—We were much disappointed, in not finding Mr. Smith at home. We walked through his houses, however, with his gardeners, and were astonished to see his very numerous collections of Camèllias, and in particular his tropical plants. We should have been glad to have paid Mr. Smith's place another visit, with the expectation that we should find him at home, but we were unfortunately deprived of the opportunity. At the suggestion of Mr. Landreth, that Mr. Smith would have no objection to our making any remarks in regard to his plants, we hastily noted down such things as appeared interesting.

We do not hesitate to say, that Mr. Smith has one of the largest and most choice collections of Camèllias. We observed numerous new varieties, and a large number quite choice and rare, which we had never before seen in bloom. Among these were the following kinds:—C. connàta, cólla, Cárolus, venòsa, Goussònia, and two or three new seedlings, which were very fine; venòsa is an elegant variety; we have since had it in flower in our garden; but they were not so good specimens. A fine striped one, which Mr. Smith raised from seed, will prove an excellent plant for producing seed, and consequently new varieties; there was also in bloom, speciòsa, fúlgens, conchiflòra, althæflòra, punctàta, &c. &c. Mr. Smith's Camèllias are well grown, and taken care of by his own hands, as are also all his plants. He is, we understand, a very enthusiastic and zealous amateur of Horticulture and Botany, and spends much of his time in his garden. Having the means of purchasing every thing new and beautiful, his hot and green-houses, display a splendid collection of rare specimens.

Mr. Smith's hot-house is built upon one side of his mansion, and the green-house upon the other, with lean-to roofs. They are about thirty feet each, and are both stocked with plants. He has also other small pits and frames, in which he grows the more common plants. In the green-house we saw Acàcia verticillàta, taxifòlia, longiflòra, and heterophylla in full bloom; several fine specimens of Azàlea were in full beauty; Rhododéndron arbòreum hybridum, with four or five heads of magnificent flowers, was just in the zenith of its splendor. A very large double white Camèllia, was also here covered with flowers. Mr. Smith keeps his Camèllias in the coolest and most shady part of his house.

In the hot-house are large specimens of Laúrus camphòra (cinnamon tree), several varieties of Palms, and the celebrated Bread fruit tree (Artocárpos incìsa), of the South Sea Islands. It grows in its native climate to about the size of our oaks. It was first introduced into England in 1793, and it is now cultivated in most of the nurseries around London; we are not aware of many other plants in the country. One of the largest Zebra plants is in Mr. Smith's collection; the gigantic screw Pine, (Pandànus spiràlis,) which not long since ornamented his house, now decorates the conservatory of its wealthy owner, in our vicinity. Mr. Smith has plants of Bonapártea jùncea, Cinerària platinfòlia, &c. He has also large species of the Crìnum amàbile. The hot-house plants were in a very healthy state, and showed that they were managed by a skillful hand.

We believe that in Mr. Smith's garden the Greville rose flowered for the first time in Philadelphia, a year or two since. His garden contains about an acre, and is laid out in a very beautiful style. He has erected a steam engine to raise water into a large cistern, for the purpose of watering every part of the garden. Nothing seems left undone, that will add beauty or usefulness to his place.

(*To be Continued.*)

ART. II. *On the Professional Education of Gardeners.* By GRANT THORBURN, Esq., New York.

[Continued from page 122.]

IN order that a professional man should excel as such, every other acquirement must be kept subservient to that of his profession. No branch of knowledge should be pursued to any extent, that, either of itself, or by the habits of thinking to which it gives rise, tends to divert the mind from the main object of pursuit. Something, it is true, is due to relaxation in every species of acquirement; but judicious relaxation only serves to whet the appetite for the vigorous pursuit of the main object. By the professional education of gardeners, we mean, that direction of their faculties by which they will best acquire the science and manual operations of gardening; and we shall suppose the young man to be instructed, to have had no other scholastic education than some knowledge of arithmetic, and the first problems of geometry and land surveying. The sort of garden which ought to be the scene of the days of apprenticeship should, if it can be so foreseen and arranged, be that which the learner is ultimately intended to possess or manage. As the great majority of young men who learn this art, are intended for serving as gardeners to private families, a private garden, where every department is respectably conducted, is the best to begin with. Here, or in any other garden in which he may be placed, he will have to learn the names of things, their use in gardening, how to use them in the best manner singly, and how to combine their use in performing the different operations of gardening.

The grand foundation of every kind of acquirement, is the cultivation of the faculties of attention and memory; unless we pay attention to what is addressed to us, whether by the eye or the ear, it is impossible we can remember, because the sight or sound has made no impression on the memory, and without memory there can be no knowledge.

Many pass through life without seeing or hearing any thing but what immediately concerns their avocations; it is a common thing for a person to walk out and return, without being able to describe, or even mention anything he has seen, or to read a newspaper without being able to tell what he has read, further than to give some vague idea of the subject; all this is the result of neglecting to rouse and exert the faculty of attention, or of limiting our attention to one single object, or class of objects. One of the first things, therefore, that a young man should do, is, to cultivate the faculty of attention, which he may every hour of the day, by first looking at an object, and then shutting his eyes, and trying whether he recollects its magnitude, form, color, &c.; whether he would know it when he saw it again, and by what mark or marks he would know or describe it. When he goes from one part of the garden to another, or is on a walk or journey, let him pay that degree of attention to every thing he sees and hears, which will enable him to give some account of them when returned from his walk or journey; and let him try the next day, or some days afterwards, if he can recollect what he had seen then, or at any particular time and place.

The attention must be exercised systematically, in order not only to impress the memory, and enable the observer or hearer to recollect objects, but to describe them. A thing, or a discourse must be attended to, not only as a whole, but as a composition of parts; and these parts must be considered not only as to their qualities of dimension, color, consistency, &c.; but as to their relative situation and position. Every faculty of the mind may be improved by use; for instance, take a child of ten years, set him down to try how many lines he will commit to memory in one hour, perhaps it may be six; but let him continue the practice for one month, and in one hour, at the end of this time, he will commit sixteen to memory with more ease. Industry and perseverance will accomplish almost any thing in this country, where a poor man has only to mind his work, and preserve steady habits, to make himself rich.

Yours, GRANT THORBURN.

Hallett's Cove, Long Island, March 12th, 1835.

ART. III. *On the Cultivation of Seedling Grapes; with an Account of the Variety called Shurtleff's Seedling.* By PEMBERTON.

GENTLEMEN,

IN the spring of the year of 1822, there came up, in my garden, a great number of young grape vines, which sprung from seeds accidentally thrown out of the house. They were supposed to be from foreign grapes. As the young seedlings made some progress in their growth, and had acquired greater strength, I immediately perceived that there was several kinds of foliage among them; some were of the parsley-leaved shape, (Ciotat), others of a dark green, with a smooth leaf, and one with a peculiar appearance; the leaf being of a remarkable light, glossy green, very smooth, and unlike any other that I ever saw. In the fall of the year, most of them having made very good growths, I pruned all the different kinds, (as they appeared,) and determined to try and fruit them. Upon the approach of frost the vines were carefully protected from the cold, by a covering of leaves, &c., as usual with other foreign grape vines. The next season, as well as the two succeeding years, the vines were treated like those raised from cuttings. The fourth year, however, I let them make as much wood as possible, only confining it to one straight cane. Some of the vines grew to the length of thirty feet, and very strong, while others only made very weak shoots, not more than four feet; the wood of these was suffered to remain during winter, so as to obtain a larger vine the next season. The fifth year I expected to have considerable fruit, but was disappointed, having only a few clusters. Two of the vines proved to be male; one a small grape good for nothing, and another vine, with dark glossy leaves, was stolen in the night.

I had consequently only two vines left, and the sixth year these both produced fruit. One proved to be similar to the common Sweet Water, or Chasselas of the gardens; the other bore only two or three small sized clusters. The grapes were oblong, of a purple color, with a grey or spotted appearance, on rubbing off the bloom, and almost white in the centre of the bunch; the berries were close, but not having the appearance of being the least pressed together. The flesh was nearly as solid as the plum, with a little of the Gage flavor, and deliciously rich. In eating, it had more consistency than any other I had ever tasted. The size of the berry was nearly that of the Black Hamburgh; and the color very different from any other variety. It was called by Gen. Dearborn, the Lilac; it is a great bearer, the bunches weighing from one to two pounds, with shoulders. The following year it produced thirty bunches of fine size; some of them were exhibited at the meeting of the Massachusetts Horticultural Society, (which had then just been formed,) and were highly recommended by the committee, who named it Shurtleff's Seedling. It has borne fruit plentifully every season, till the last; which cause I suppose to be from overbearing the year previous; as a large number of clusters were permitted to ripen, which, at the time, I was afraid would cause the vine to suffer. This last winter I left a vine exposed to the weather, without the least protection, in order to try its habit as a native vine; I cannot yet tell the result of the experiment. I was induced to try its hardiness at this time, as I have a number of vines large enough to bear fruit the coming season. The fruit begins to color in August, and ripens well in the open air. I have had it in eating in August, but I should think in common exposures, that September or October would be the average time.

Yours truly, PEMBERTON.

Boston, April 8th, 1835.

Art. IV. *On the Propagation of the Grape Vine; with Observations on its Management, Pruning, &c., in the Green-house and Grapery, and the formation of Vine Borders.* By J. W. Russell.

Gentlemen,

I shall conclude my remarks with a few practical instructions on the training, fruiting, and pruning of the vine. In the first place, I intend briefly to state my reasons for recommending the vines to be introduced into the grapery, every two and a half feet. The intention is to make sure of a good crop of fruit every year; not only in having an abundance, with scarcely a chance of failure, but so as to be able to produce grapes perfectly ripe, and of exquisite flavor. I think I shall not be thought to exaggerate much, when I say, that well ripened grapes are always a very scarce article in the Boston market. I am aware that it will be said by some cultivators, that it is by no means uncommon, to see plenty in full perfection every year in the market. That the tastes of individuals differ very much, is well known to every body, for what is admired by some, is not at all pleasant to others. I have known some persons to prefer the Isabella grape, well known in this country, to any of the European sorts. I cannot account for this in any other way, than from the quantity of foreign grapes sold every year not half matured. But present to any person who has a relish for good fruit, a bunch of the Black Hamburgh grapes, well grown and thoroughly ripened, with a fine bloom upon the berries, and a bunch of any of the sorts indigenous to America, equally well matured in every respect, and after eating of each, the native fruit should be pronounced the best, I certainly should conclude the *taste* was decidedly bad.

The system of fruiting I shall recommend, has not, to my knowledge, been much in practice in this vicinity. It will be perceived, at once, that the vines are planted too close together to be fruited in the ordinary way. The intention is to fruit them alternately every year; this appears to be a very natural process, giving those that have produced large crops this year, the next to recover, by planting, as before stated; and following this system, there will be a vine every five feet throughout the house, in full bearing every year. Supposing the vines were planted in the month of June in the border, from the pots, and introduced into the grapery; with judicious treatment, they will have made a growth of eighteen or twenty feet by the first of November, and they should be pruned the first or second week in January; but if no artificial heat is kept up in the house through the winter months, they must be pruned immediately on the approach of severe frosts; and well protected from the sudden changes of the weather. The wood should be left four or five feet in length, according to its strength, but in this the operator must be his own judge, as I do not think that any invariable rule can be laid down, as a standard to go by. Since what appears reasonable to one person, is not equally so to another, so that in order to prosper in the *art* of grape growing, as well as in any other kind of business, the gardener must have a mind of his own, and learn to judge for himself on every occasion; to endeavor to see clearly and distinctly, right from wrong, as far as lies in his power; remembering that continual practice is worth volumes of theory, no matter however flowery it may appear.

Each vine the second year might be allowed to bear five or six pounds of grapes. No doubt but they will show twice the weight of fruit that I have recommended to be left: however, I should take off the superfluity, preferring six pounds of ripe grapes, to twelve or fifteen pounds not fit for the table. The leading shoot, or the next to it, should be taken up to the top of the house, and carried along horizontally, *five* or *six feet*, before it is stopped. A shoot should also be taken up from the bottom of the vine, to the *top* of the house, and there stopped. The same treatment should be pursued, as just stated, with every vine through the house; it is probable they will grow the second year very luxuriantly. The lateral shoots should be left on, bearing in mind to stop the growth, at the first joint, looking over them every time you enter the house, to see if all is going on right. It is absurd to have set days, for different sorts of work in a grapery or green-house; every day and every hour is the time—there is no time like time present—to remove any thing that should be removed, because if left until another opportunity, the injury done might be *irreparable.* After the laterals are stopped, they will soon put forth another growth; they should be stopped again at the joint above the one that was stopped the first time, and kept at this joint, by frequently looking over them the remainder part of the season. The reason for leaving the laterals, is to prevent the fruit bearing buds from prematurely starting to grow, which is frequently the case if they are taken from a luxuriant growing vine. The shoots that have the fruit on, should be treated in the same manner as recommended for the laterals, with this exception, to stop them one joint above the fruit. When the grapes are coming into flower, a regular temperature should be kept night and day, to bring the whole into bloom as nearly at *one time* as possible; when this is not attended to, the berries set irregular. I have frequently seen two or three different sizes in the berries, in one bunch, and I have no doubt but it generally arises from a want of a proper temperature at the time of flowering. Thinning out the bunches is also necessary, when the grapes are about as large as a pea; this should be done with scissors made for this purpose; taking out at least one half of the berries, and always the smallest, leaving the bunches as regular as possible.

The second year of fruiting the vines, will be the time to put the system I have recommended into practice. Having decided which end of the house you will commence at, (it will be seen that there will be no choice after the first year, as they must come in regular rotation,) the laterals should be carefully cut off the fruiting cane, so as not to injure the buds, also those that bore the fruit, cut close off to the old wood, being mindful to rub off all the shoots that make their appearance, as they are not wanted, and of course, if left on, would not only make confusion, but would take away from the other part of the vine, the support it ought to receive. The cane that was taken up from the bottom, should be shortened about a foot below where the top one starts from ; the upper one to be cut about two or three feet from the top of the house—thus fruiting from canes every year. The cultivator may have three or four shoots from the main stem, to bear the crop of fruit, which would perhaps be preferable to two—but the whole should have the appearance, when in fruit, of one continued cane from the bottom to the top of the house. The next vine, of course, will be headed down, leaving four or five buds to each cane, for the purpose of having six or eight bunches of excellent fruit. The lowest bud of each cane must be carefully taken up as before observed.

Whatever method is adopted in training the vine, if not the one I have described, it should be always borne in mind, not to leave too much wood on a vine, as nothing is more prejudicial ; and I would also advise that the spurring in method, though pursued by some cultivators, be particularly avoided. Much more might be written upon this subject, and various and minute things mentioned for the successful cultivation of the vine ; but if, in my humble efforts, I have given a general outline, and laid the foundation for future advancement, it is all I have aimed to perform.

Yours, J. W. Russell.

Mount Auburn, Cambridge, April 7th, 1835.

Art. V. *On the Cultivation of the Dahlia.* By Mr. Peter Mackenzie, Gardener to Henry Pratt, Esq., Lemon Hill, Philadelphia.

Gentlemen,

According to your request, I send you a few remarks on the cultivation and propagation of the Dahlia, wholly dispensing with the planting out of old roots. I perceive in the April number of your Magazine, page 130, an article on the cultivation of the Dahlia, by Mr. E. Putnam. He informs us that the best mode of propagating Dahlias is, by a division of the tubers. I will in the course of my remarks, call Mr. Putnam's very particular attention, informing him, at the same time, that more flowers, and the finest formed ones, and these in greater profusion, are to be found on plants raised from cuttings. Supposing Mr. Putnam to be fortunate enough to have a fine variety, that no other person possessed; and as it frequently happens with the finest of roots, that only one eye will make its appearance; I ask Mr. Putman how he would manage in dividing the roots of this. The answer might be, having no more eyes, it must grow. If this, however, was treated in the manner above, it might prevent others for years from growing the variety, and it would only be seen at Salem. I would therefore advise heading down this first shoot, if it was only to throw it away, as a Dahlia, when checked in this manner, will in nine cases out of ten, throw up eyes from where none would have come, had the first shoot been allowed to grow.

For myself, I would as soon have the first cutting as the whole root; being strong, I could very soon have plenty from it. I will now call Mr. Putnam's attention to the following mode of propagating this "king of flowers." About the middle of January I pot my roots, according to their respective sizes, placing them in the hothouse, as near to the light as possible; giving gentle waterings until the eyes make their appearance, when they require a more copious supply. About the same time I procure from the stable yard a quantity of fresh hot manure, making it up in a hot-bed for a one, two, or three light frame, according to the number required, making the bed upon level ground, and about two feet in height. After the bed is made, the frame should be placed immediately upon it, and about three or four inches of sand or ashes on the surface of the manure; sand, or ashes, being warmer than common soil—and also preventing slugs or worms from committing any destruction. The sashes should be put on, and kept close, until the heat rises, which will be in the course of two or three days. By this time the Dahlias in the hothouse will have made shoots three or four inches in length, with the foliage a little expanded; I cut them off as close to the crown of the root as possible. They will be found to strike more freely when cut close, and just below a joint, than when cut in the pithy part of the stem, being careful to leave an eye below where you cut, as from this you may have two more shoots in the course of a few days. In this manner you may go on increasing the number of plants, looking over them every evening, and taking off such as are expanded in the foliage. Having, previous to this, mixed a compost of two parts leaf mould and one of sand, I fill as many of No. 60, or three inch pots, [No. 2,] as may be wanted for the first evening, (preferring the evening for this operation;) and with my finger, I go over the whole, and make a hole in the centre of each pot; this hole I fill up with pure sand, placing my cuttings one in each pot, and with both thumbs pressing them as tight as possible, writing the name of each correctly on a label, and placing the same in the pot to which it belongs. When done, I sprinkle them all over with a fine rose, and carry them immediately to the hot-bed, keeping the frame shut close, day and night, and sprinkling them every morning and evening, and shading with mats from the hot sun.

Dahlias, treated in this manner, will be found to make finer plants, not growing so much to wood, flowering much earlier, having larger flowers and a greater abundance; and making finer roots for keeping over another winter. As the heat declines in the propagating bed, it must be kept up with linings.

Mr. Putnam says, "when struck in February or March in a green-house, they make as good plants," &c. This, in my opnion, is the last place they ought to go to, previous to their being planted in the open ground. Attempting to strike Dahlias in a green-house, (in Mr. Russell's words,) "they would soon wilt down to rise no more;" it being as easy to have a hot-bed as a green-house; and in want of a hot-house to start them in, I would recommend a hot-bed similar to that which I recommended for the cuttings; I would prefer potting them, to planting in the bed, as there is less danger of burning the roots. When the Dahlias that were first put in from cuttings appear to be growing in the hot-bed, by turning them out of the pots, they will be found to have filled them with roots; they should then be carried to the green-house on a cold frame, till such time as the frost is over, and the weather favorable for planting out in the garden. As an instance of this method, I propagated, in the spring of 1834, from a collection of one hundred roots, with the same number of varieties, upwards of two thousand flowering plants, with scarcely a failure.

The brilliancy of this flower is already too well known to need any farther praise from me, other than that our flower borders in the autumnal months, present a very meagre appearance without a large number of this Royal Family reigning amongst them. Grafting Dahlias is done more for the gratification of the curious, than for any profits that may arise from the practice. I have flowered as many as four varieties upon one root; the lateral shoots of the plants require to be cut off, leaving none but the leaders, choosing those that grow about the same height. I prefer leaving the roots as long in the ground as possible, as they will ripen as well after the tops are cut off as before; cutting them off close above a joint, to prevent rain from lodging in the stem. After the roots are taken up, place them upon sparred shelves in a dry cellar, where there is no danger of frost.

The foregoing remarks, being the results of practical experience for years, I can with confidence recommend them to any that may have the convenience, and more especially to cultivators and propagators. Should you deem them worthy of a place in your most valuable Magazine, you are at liberty to insert them when you may think proper.

Yours, PETER MACKENZIE.

Philadelphia, April 11*th*, 1835.

Art. VI. *Proliferous Character of the flower-stalk of the "Lilium Candidum."* By John Lewis Russell, Professor of Botany and Vegetable Physiology to the Massachusetts Horticultural Society.

Perhaps it is not familiarly known to many of your readers, that the flower-stalk of the White Lily (Lilium Candidum), cut immediately after the sepals have fallen, and kept in an upright position in a cool and shady situation, will evolve from the axis of its bracteal leaves distinct bulbs, capable of producing perfect plants. My attention was first attracted to this curious fact by the kindness of a friend, some three or four years since, and I have uniformly been successful in the result, whenever I have renewed the experiment. But the vital energy is not only continued and developed in the production of these hitherto adventitious bulbs, several of the capsules even, ripened sound and vigorous seed. Of course the usual impregnation is presupposed; but it is by no means a *general,* though not *uncommon* event, that the seeds of this plant should ripen when the stem *continues in its usual functions,* attached to the parent bulb.

Now this apparent phenomenon is a beautiful illustration of the true character of bulbs, erroneously heretofore, and for many reasons, *still* called *bulbous-roots.* It is well known to every practical gardener, that when any accident occurs to tunicated bulbs, such, for instance, as injuring their scales or living coats, by wounding with the knife, or by any forcible rupture, the *bases* of the scales immediately protrude sound and minute bulbs. By such means, although destructive to the parent bulb, he is enabled to increase his stock of rare plants of this family to almost any extent. Strictly and properly speaking, there is no such thing in nature as a bulbous-root. The bulbs of the Hyacinth, an Amaryllis, or a White Lily, are *true and perfect plants,* for they individually possess a root, stem and leaf-bud, the latter of which is fully capable of evolving leaves, flower-buds, and fruit or seed, all the *essentials* of the vegetable. The *base* of the bulb is its stem or trunk, technically called the *collet* or neck; the *fibres* are the true roots, and the tunicated or scale-like substances situated on the neck, constitute the *leaf-bud.* Like every other plant, when arrived to that maturity which calls forth the production of the flower, the flower bud is formed within, destined to rise the next season and expand its organs of reproduction. The functions of the expanded *leaves* make two annual increments to the plant; first, a new layer on the stem or collet; and second by producing fibres. As each of these leaves decay at the end of the season, the elaborated sap descends into its base, forming another scale or tunic to the bulb or leaf-bud. The leaves and flower-stalk *both* arising from the interior, it happens that in process of time, the exterior scales or tunics become useless, and lose their vital power. The flower-bud expands upwards simultaneously with, or shortly after the appearance of the leaves. In the white lily the latter is the case. This expansion produces a tall stalk covered with imperfect foliage, called bractes. These leaf-like organs accompany the inflorescence of most plants. When the purposes of this expanded stalk of the flower-bud are accomplished, it becomes desiccated, and the elaborated sap descending, assists in forming at its base a new flower-bud for the next season.

Although we may invariably look for the leaf-bud in the axis of every leaf, as there it *must* exist either in a dormant or sentient state, yet these same vital germs are to be found even in the axils of stipules, bractes, sepals, petals, stamens, and carpels: but in these latter situations they are commonly undeveloped.

Suppose we now cut away the flower-stalk, as directed in the beginning of this essay. The vital energy is still continued in the stalk, a fact by no means uncommon in many plants. The infant *germ* or capsule therefore continues to swell and increase: the descending and elaborated sap calls into existence these dormant and hitherto undeveloped leaf-buds which exist in the axils of the bractes: and once awakened into life, they immediately appropriate to their increase the remaining juices of their parent stock; deriving from it, and the humid atmosphere, their necessary food. Presently radicles shoot forth from their bases, as if the young plants were desirous of answering the great and important end of their adventitious existence. When the flower-stalk has ceased to give support to any one of them, it falls to the earth, to be received into its genial bosom, and destined for future increase.

Buds, it has been truly said, are individual vegetable existences. A tree is therefore a vast congeries of living beings, each individual capable of perfect development. By this great law, we take advantage of Nature in many of the branches of Horticulture. The *dormant* leaf-bud in the bracteal axil in this instance, has been called into life, and has become without the aid of Horticultural knowledge and experience, a separate and perfect plant, similar in every respect to its parent.

I trust, Messrs. Editors, that some of your readers will repeat this experiment, for their own satisfaction: it being, as I conceive, a curious fact in vegetable economy. Perhaps it may not be new to some; but finding a place in your columns, it may prove interesting to others, who are fond of tracing the mysterious laws of Physiological Botany.

Yours, JOHN LEWIS RUSSELL.

Pittsburg, Pa., April 5th, 1835.

Art. VII. *On the Cultivation of the Schizánthus.* By Mr. D. Haggerston, Gardener to J. P. Cushing, Esq., Belmont Place, Watertown.

Sirs,

Your frequent solicitations, and the great admiration the plants of the Schizánthus pinnàtus under my care have received, induces me to communicate to you my mode of treating this beautiful annual, which, if you think will increase or perfect its cultivation by insertion in your useful Magazine, it is at your service.

I sow the seed in pots, (if in the winter or early in the spring, plunged in moderate heat,) on a mixture of sand and leaf mould, rather coarse, covering it lightly with fine sifted earth. When the young seedlings show four or six pinnate leaves, I pot them off into small sized, or what we call No. 1 pots, using plenty of broken potsherds for drainage. I find sowing the seed on coarse leaf mould is very beneficial at this shifting, as the small roots, penetrating the lumps of earth, they can be potted off without receiving the least check in their growth. The soil I grow them in, is composed of two parts good rich loam, one part leaf mould, and one part sand, well broken and mixed together, but not sifted; care must be taken to shift them into larger pots before the roots get too much matted. I have always found that when they have grown in the same pot until they become matted round the sides, after shifting, the plants will turn yellow, and have a sickly appearance, and it is with difficulty they regain their proper color and health. I continue to shift them once a fortnight or three weeks, until they come into flower.

Some of our plants are over six feet high, and have been covered with flowers ever since the first of December, in such profusion, that they are the first object which strikes the eye on entering the greenhouse. The watering requires particular attention, for on this depends their success altogether. I never give water until the plants show they want it; and many times when they are growing luxuriantly, I let them flag an hour or two; but in this state they must not be exposed to the hot sun; I then give a sufficient quantity of water to penetrate to every part of the soil in the pot. For a long time I was much troubled by the plants to appearance, damping off at the surface of the soil, and thought it was caused by too much water. By turning out several plants, however, as soon as they showed symptoms of sickness, I found the abundance of their fibrous roots prevented the water from penetrating more than two or three inches into the soil, and so far the fibres were perfectly healthy, but beneath this the mould was dry and the roots decayed. I was convinced the disease began in the decayed fibres, and affected the extremity of the main root; which continued to damp until it arrived at the surface of the pot, when all communication with what few fibres were alive, being prevented, the plant, of course, dies at once; and a common observer, pulling it up, would suppose the disease had just commenced, when in fact it had terminated.

Since adopting the mode of watering as recommended above, I do not recollect losing a single plant. I wish particularly to be understood, that at every shifting or repotting of the plants, I use a quantity of broken pots for drainage, increasing this quantity with the size of the pots, from one to three inches. If you would allow me to suggest to you to copy from that excellent work, Robert Sweet's Hothouse and Green-house Manual, his concluding paragraph on the cultivation of the genus Amaryllis, on draining pots, I think it would be of great benefit to many of your readers, particularly those who are fond of growing plants in rooms; I am convinced, with him, that there are more plants killed or badly grown, by this simple process not being properly attended to, than from any other cause.

The seed of the Schizánthus pinnàtus may be sown at any season of the year; it will flower in about four months, from the seed, equally well in winter as in the summer. To cultivate it out of doors, the seed should be sown about this time in a gentle heat, the plants potted once to give them strength, and the first or second week in June, turned into the flower borders in a well sheltered situation; but from the delicate habit of the plant, it being very easily broken by wind or heavy rains, I am doubtful if it will ever be grown in such perfection out of doors, as in the green-house, or a good airy room. The sportive character of this plant adds very much to its beauty. We have flowered about forty plants this winter, scarcely two of which were alike in the color of their flowers, and many of them very distinct, as much so, as many florist's flowers.

Yours, David Haggerston.

Watertown, April, 1835.

Art. VIII. *On the Culture of "Epigæa repens."* By R.

Having lately met with some fine plants of "*Epigæa rèpens*" growing in an unusual situation, viz. on a moist, rocky, hill-side, among moss, I was led to think that this beautiful vernal plant might be successfully cultivated on rock-works, by imitating the same situation. Completely imbedded in the long, velvety carpet of "*Polytrichum commùne*," (Hair moss,) they formed a pleasing contrast with it, by their delicate white flowers.

The excellence of moss, in preserving many plants in perfect health, which are otherwise impatient of cultivation, is well known, and I see no reason why this desirable plant, could not become an humble but interesting occupant of a shady border, or rock-work, with the "*Linnæa boreàlis*" and "*Mitchélla rèpens*," which it resembles so much in general habits. It is one of the earliest floral harbingers of spring, and would find a welcome in any good collection of native plants. I could wish that some one might improve this hint. R.

Pittsburg, Pa., April, 1835.

Art. IX. *Observations on the Cultivation of Annuals; with an Account of those choice and beautiful of late Introduction; and Remarks on the Varieties most suitable for planting in Masses.* By the Conductors.

In our last we detailed the method of cultivating several of the most beautiful tender annuals; but as the season has now so far advanced, we omit the particular mention of any more varieties in that class. We were particular to select such as were the most difficult of cultivation, and if our directions were attended to, we are confident there will not have been a failure. Most tender annuals will succeed very well if planted in May, when the weather is fine, but their bloom will not be either so beautiful, or of so long duration, as if planted earlier in the hot-bed. We proceed now to enumerate some of those of the second and third class. It would be impossible, in the short space we are allowed in this article, to particularize but a few; we shall consequently select the newest and most showy. Some of the varieties have never been grown in this country, and we have had recourse to some of the English periodicals for general information.

Half-hardy and Hardy Annuals. These should be sown in the open border; the former not until the middle of this month, unless the weather is very fine and favorable. The latter may be sown immediately, and will generally vegetate without much care.

Eschschóltzia califórnica. This brilliant annual, (and perennial,) is a native of California, on the North-West Coast, and was introduced into England by Mr. David Douglass, the London Horticultural Society's Botanist, in 1826. Its native habitat is on light dry, sandy soil, where it flowers in the greatest beauty all the year. The seeds should be sown, if possible, the latter part of April; but early in May will answer. A warm dry spot, on a light sandy soil, should be selected, and the seeds sown where the plants are intended to remain; as all the Papaveràceæ family are very impatient of transplanting; their spindle, carrot shaped roots, without any small fibres, preventing their safe removal; we have known plants so much injured as not to attain to a flowering state, until the weather was too on the North-West Coast. The plants will flower rather stronger and more profusely, if the seed is planted in April; but they will have abundance of flowers, if not planted until the middle of this month. Select a situation where the soil is not enriched in the least, as such is extremely injurious to their health; they will flourish finely in a light turfy loam, or loam and decayed leaves. We have often had several plants die off at once; and could not account for it from any other cause, than from too rich a soil; there is a white variety. When both of them are grown in large masses, they are the greatest ornaments of the flower border.

Calámpelis scàber (Rough-podded Calampelis). This exquisitely beautiful climber, formerly known under the name of Ecremocárpus scàber, is of late introduction: it is a perennial, but flowers the first season. It is a valuable addition to our limited list of climbing plants, and should find a place in every garden; the flowers are produced in panicles or racemes, and are of a bright orange color; it flowers profusely in the latter part of summer, and should be protected through the winter in a warm cellar or green-house. We do not know but what it may stand our winters, if protected with leaves, &c. We have not, however, yet made the trial. The seeds should be sown at this time, in a warm situation, and if the weather should be dry, they should be watered, as they require to be kept rather damp while vegetating; the seeds, very often, lie six months in the ground before they come up. When the young seedlings have made five or six leaves, they should be transplanted into the open ground, or into pots. If placed in the green-house, the plants will continue to flower until December.

ART. X. *Short Communication.*

Culture of the Tigridia pavonia. This beautiful bulbous root is cultivated in the easiest manner. If it is desirous to have them flower early, the bulbs should be potted in small (No. 2) pots, filled with a compost of loam, leaf-mould, and sand, in equal parts, and placed in a hot-bed; when they have made leaves two or three inches in length, they should be repotted into the third size, adding a little more loam to the soil. Place the pots in a warm situation, until they begin to flower, when they should be set in a shady place, or carried to the parlor, as their flowers remain open much longer than when exposed to the sun. If planted in the border, they should be set in a warm place, in a light, sandy soil. Protect the bulbs from frost upon the approach of cold weather.

Yours, S. SWEETSER.

Cambridgeport, April, 1835.

REVIEWS.

Art. I. *An Address delivered before the Columbian Horticultural Society, at the first annual exhibition, June 6th,* 1834. By George Watterston, Esq. Pamphlet, 8vo. pp. 33. Washington, 1834.

By the kindness of the author we have received a copy of this very interesting and eloquent address. It is with great pleasure that we read the addresses which are delivered before the various Agricultural and Horticultural Societies throughout the country. They not only afford gratification and delight to every lover of Horticulture, but they are greatly instrumental in promoting the spread of a taste for its agreeable and innocent pursuit; creating a more lively interest in its advancement and future progress, and exciting a greater desire for the possession of the beautiful, as well as the useful productions of the vegetable kingdom.

The address by Mr. Watterston was the first delivered before the Columbian Horticultural Society, of which he is Corresponding Secretary. We have been highly entertained with a perusal of it, and we have made a few extracts which will, we think, be exceedingly interesting to our readers. Mr. Watterston commences by passing a just encomium on the pleasure, as well as the benefit to be derived from a love of Horticultural pursuits. Its salutary and good effects upon the young—the agreeableness and pleasure it affords in manhood—and the charms and attractions it presents to old age—are described by him in a very felicitous manner.

Mr. Watterston proceeds:—

"To none, however, is the garden a source of higher and purer enjoyment than to the female sex. Their sensibilities being more acute, they relish, with greater intensity the beauty which surrounds them, and which they cannot fail to behold in every border, and flower-woven arbor—in every plant and shrub and tree over which the eye glances as it roams amidst the varied beauties of a well cultivated garden. To them the floral department is an object of especial attraction. The exquisite coloring, and the delicate and graceful forms of the productions of Flora, are nicely adapted to the fine perception of beauty which exists in the female mind. In what region of the world, in what condition of life, does not the love of flowers prevail among females? In the lowly cottage, as well as the magnificent palace, it displays itself in the floral wreath, and the woodbine, and jessamine, and rose, that diffuse their fragrance and decorate the latticed window of the humble dwelling of innocence and poverty. In the populous city, where the want of ground prevents the indulgence of their favorite propensity in its full extent, the windows and parlors of their habitations are often found ornamented with the rose, the mignionette, and the geranium. 'But who,' says Boursault, 'does not love flowers? They embellish our gardens; they give a more brilliant lustre to our festivals; they are the interpreters of our affections; they are the testimonials of our gratitude.

We present them to those to whom we are under obligations; they are often necessary to the pomp of our religious ceremonies, and they seem to associate and mingle their perfumes with the purity of our prayers, and the homage which we address to the Almighty. Happy are those who love and cultivate them.' There is, moreover, in the well cultivated garden, a placid beauty and a stillness and repose suited to the tranquillity of domestic life, and which, in the bustle and excitements of the world, make us hope, like the poet Cowley, that we may be able 'one day to retire to a small house and a large garden.' There is much truth in the observation of Mrs. Hofland, 'our first most endearing and sacred associations are connected with gardens; our most simple and most refined perceptions of beauty are combined with them, and the very condition of our being, compels us to the cares, and rewards us with the pleasures attached to them.' The Greeks appropriated their celestial gardens to the gods; and the Mahometans, says Phillips, reserve their flowery lawns and umbrageous bowers for scenes of future bliss. To the fair sex may be attributed many of the improvements and beauties which are now so conspicuous in the ornamental or landscape garden. The wonderful hanging gardens of Babylon are said to owe their origin to the Queen of Nebuchadnezzar, who to pacify her regrets at leaving the country in which she was born, and which appeared so beautiful by contrast, erected the famous terraces, covered with trees, and supporting rural seats, fountains, and banqueting halls, which formed one of the wonders of the world. But, whatever may have been the influence exercised by woman in the formation and improvement of the gardens of antiquity, it is certain that there is no department of nature so appropriate to the female hand as the cultivation of flowers. 'Flowers seem intended for the embellishment of the fair and for the ornament of the spot where they tread. Their sweet perfumes have such influence over all our sensations, that in the midst of flowering shrubs the most acute grief generally gives way to the sweetest melancholy. When our home or domestic companions are encompassed by the shrubbery, our situation then approaches nearest to a terrestrial paradise.' There is, perhaps, no object in nature more pleasing than a young and beautiful woman, blooming in innocence and loveliness, seen amidst a parterre of flowers, herself the fairest, sustaining the drooping lily, or administering to the nourishment of the expanding beauties of the rose."

Mr. Watterston continues with an account of the progress of Horticulture, Botany, Landscape Gardening, &c.

In speaking of the improvability of vegetable nature, he remarks :—

"But to render cultivation effectual, Horticulture as a science requires, in addition to Botany, the aid and co-operation of other branches of knowledge, among which the most important are Chemistry, Mineralogy, Rural Architecture, and Entomology. The scientific gardener should be acquainted with the various materials, or substances, of which the earth that he tills is composed, that he may, with greater certainty and benefit, know how to adapt the plant to its most congenial soil, and the soil to the plant. A knowledge of the properties of compost, the manner in which lands are enriched, the causes of their fertility, the peculiar character of each soil, the effect and operation of different manures on vegetation, &c., are indispensable to the skilful horticulturist. Rural Architecture, Hydraulics, and Mechanics form no inconsiderable portion of the necessary information of the landscape gardener. Indeed

> 'Ce noble emploi demande un artiste qui pense
> Prodigue de genie, mais non pas de depense.'—Delille.

"But to the practical horticulturist no branch of physical science is more useful and important than Entomology. Small as the objects may be of which it treats, and insignificant as it may seem to the generality of mankind, it is, nevertheless, highly interesting in itself, and of great and obvious utility to the gardener. The matchless wisdom and perfection of God are not less strikingly manifested in the formation of this class of animated beings than in the other portions of his animal kingdom. The fairy and gorgeous butterfly, and the brilliant beetle, are as exquisitely imagined and as elaborately executed as the most splendid floral production of his hand. To these 'valued miniatures, nature has given the most delicate touch and highest finish of her pencil. Numbers are armed with a glittering mail like burnished gold; in others is the dazzling radiance of polished gems; some are decked with what looks like liquid drops, or plates of gold and silver; some vie with flowers in the delicacy and variety of their colors; others in the texture of their wings; and others in the rich cottony down that clothes them.' Their instinct and magical transformations excite our admiration and astonishment. In the wonderful metamorphosis of the insect tribe, passing from the inert mass, the egg. to the perfect animal, through all their different stages of existence, we cannot fail to recognize an analogy between these physical changes and that which our immortal spirits are destined to undergo; and I cordially concur, with an able writer on this subject, in the belief "that one of the great purposes of the Deity in creating his insect kingdom was to excite this sentiment (a belief in the resurrection) in the human heart, and to raise by it the contemplative mind to look forward to a possible revival from the tomb, as the butterfly from its sepulchral chrysalis.'

The value of Horticultural societies are particularly mentioned, and the Cemeteries of Pere la Chaise at Paris, and of Mount Auburn in our vicinity, are spoken of in terms of the highest praise.

Art. II. *The Southern Agriculturist and Register of Rural Affairs.* Edited by A. E. Miller, Esq. In Monthly numbers, 8vo. $5 per annum. No. IV. for April.

We have received the numbers from the commencement of the present volume, (the VIIIth of the work) of this very excellent Agricultural periodical. We should have before taken notice of it, as also several other valuable and highly useful publications on the subject of Agriculture; but we have been so far compelled, for want of room, to defer them until a more favorable opportunity offers, for us to speak of them more particularly. The former editor of the Southern Agriculturist, J. D. Legare, retired from his arduous duties with the close of the last year, and the successorship has been taken by Mr. Miller.

Mr. Legare was a very able and courteous editor, and the success of his work was ample proof that he did not labor in vain, to advance the science of Agriculture in the southern States. We have no fear but his successor will sustain the high character of the work.

In the April number we find the conclusion of an article on the cultivation of the Peach Tree, by a correspondent. We extract the following, on the prevention of the *Aphides* and *Curculio* from infecting the trees ; the method recommended for the latter insect is new to us, and probably to most of our readers. We have never heard of this insect's infecting peach trees, in this region : our plum trees, however, have of late years lost nearly all their fruit from their ravages :—

"The next enemy calculated very much to injure the tree, and prevent its bearing, are very small brown insects called *Aphides* ; these commence their depredations by collecting in great clusters, upon the early shoots, occasioning the young and tender leaves to curl up, and finally to die, depriving the tree of that portion of nourishment, which it derives from the atmosphere through its leaves; they prefer young to old trees, and the ends of the branches of the new wood, to those of more maturity. I have known a moderate sized tree in the course of a few days literally covered with them, and all its foliage and blossoms entirely destroyed; the tree survived, but bore no fruit even the succeeding year. To counteract the depredations of this insect, vinegar is said to be a very powerful application. I have generally succeeded before the evil progressed too far, by saturating a common bottle of lime-water with corrosive sublimate, and with a small painter's brush, applied the mixture to their several groups, which instantly destroyed them. Nay, so delicate are they, that the slightest pressure of the brush upon them, would destroy them, although during the late severe weather, I saw them upon the body of a small tree entirely encrusted in ice for days without sustaining any injury.

"The insects I have described, injure the fruit by their attacks upon the tree. There is one class, however, that depredate immediately upon the fruit, called the *Curculio*, a species of weevil of the order *Coleoptera*—of this genus from 800 to 1000 species have been enumerated, and it is believed that many have escaped observation. Among these are to be found the various insects that infest granaries, eating their way into grains of corn, leaving nothing but the husk; they are to be found in other seeds, in the inside of artichokes, thistles, and other plants; also in various kinds of nuts, as chestnuts, hazlenuts, &c. The *Curculio*, perhaps the most destructive of all insects to fruit, may be described in common parlance as a very small winged beetle that emerges from its chrysalis state, about the time of the early formation of the fruit in spring; they crawl up the tree, being rather awkward on the wing; when in sufficient numbers, they deposit an egg in each fruit, preferring, in all cases, the smooth skin to the rough. This egg soon hatches, and the *larva*, feeding on the fruit, in process of time occasions it to drop; the worm immediately descends into the earth, and becomes a chrysalis; remaining in that state during the whole winter, it becomes converted into a *Curculio*, ready prepared for fresh depredations. So reluctant are they to use their wings, that Dr. Tilton states, that two trees standing so near to each other as to touch, the fruit of one was destroyed whilst that of the other escaped. I can vouch for a similar circumstance in relation to my own trees.

"Amongst the many remedies proposed for this evil, the most important, are those which are calculated to prevent the *larvæ* from passing into the chrysalis state. In large orchards, hogs are invaluable, for as soon as a fruit falls, it is eaten up by them, thus preventing the worms from passing in the earth. In small orchards, a peach that has fallen should immediately be picked up, and the worm contained in it destroyed ; in these, poultry should be freely admitted, as they would invariably seek for the hidden worm in the fallen fruit. The most effectual method, however, to guard against the evil

I am speaking of, is to pave the ground; I do not mean as some do, lay a few bricks without mortar around a tree; this is useless. The yard or ground, must be substantially paved with brick and mortar, or rammed with dead oyster shells, so as to present a hard surface. The utility of this expedient is very apparent; for when the fruit falls, and the worm leaves its habitation in search of winter quarters in the earth, its progress will be arrested by the impervious nature of the surface, and its destruction rendered certain. This could not be effected unless the pavement extended beyond the outer branches of the tree; for it is evident, the pavement could not protect the tree against those worms that should fall beyond its range. In paving, the ground should be previously well manured. Dr. Tilotson remarks, that in paved ground the trees may be set very close, the excess of rain being carried off by the pavement, and their luxuriance being thus restrained, such trees must not only produce great crops, but from the effect of the sun on the naked pavement, the fruit must be of the finest quality."

MISCELLANEOUS INTELLIGENCE.

Art. I. *General Notices.*

Chenopòdium Quinòa. Humboldt states (as we have quoted in the *Encyc. of Gard.* 2d edit., §948,) that this plant, in Mexico, ranks in utility with the potato, the maize, and the wheat. The leaves are used as spinach or sorrel, or as greens; and the seeds in soups and broths, or as rice. Throughout great part of South America, and especially in Peru, the seeds are in as common use as rice is in Hindostan. The seeds are considered more heating than rice, and on that account they are frequently given to domestic poultry to make them lay early. The plant is an annual, and in general appearance resembles the *A*triplex horténsis, or French spinach; and, under the same circumstances of soil, climate, &c., will grow to about the same height as that plant. The seeds are small, yellowish white, round, somewhat flattened, about a line in diameter, and, on a cursory glance, might be mistaken for those of millet. Mixed with the latter seeds, and fermented, a pleasant kind of beer is said to be produced. They are contained in a single envelope, from which they are very easily separated. The *Quinòa* was first introduced into England in 1822; and it has ripened seeds at Kew. No particular notice, however, appears to have been taken of the plant till this season, when it has been grown by A. B. Lambert, Esq., V. P. L. S., at Boyton, where it has ripened abundance of seeds on plants varying from 3 ft. to 7 ft. in height. These seeds Mr. Lambert will, no doubt, distribute all over Europe; and, we trust, the plant will now have a fair trial both in gardens and fields. To do any good in producing nutritious seeds, the plant should be subjected to field culture, in which we see not the slightest difficulty. It might be sown very thinly in drills, 3 ft. apart, at about the same season as barley, and the plants afterwards thinned to the distance of 1 ft. apart. There appears, at present, no reason whatever why it should not become as common in the fields of Europe as barley, wherever that grain can be cultivated. In the mean time, we hope it will be tried first in gardens, in order to raise abundance of seed for future experiments in the field.—*Gard. Magazine.*

ART. II. *Foreign Notices.*

Coloring of Garden Walls.—Take a quantity of Lime-stone, as it comes *fresh* from the kiln, according to the extent of walling desired to be washed over. Slack it with *cold* water; have ready some *finely* sifted, clean, sharp sand, and mix it with the finely slacked quick-lime, (in a large water tub, for the convenience of removal where required,) in the same proportion which is practised by builders in preparing a good cement for brick laying; add to it such a proportion of the best bright red ochre, or raddle, as, when dry, becomes a lively blush, or pink color. This color, when laid upon the walls, has a cold raw appearance; but if *double* the quantity ot *best bright* Yellow Ochre be added to that of the red, it gives a tint that is warm, rich, and pleasing. Thin the mixture with cold water, till of the consistency of well prepared oil paint. It is applied to the walls with the usual white wash brushes, and when put into the method, any expert laborers lay it on expeditiously and well. In using, stir it well up, so that the sand, &c., be kept suspended in the water, to be taken up in its required proportion, with the brushes.

When the trees are all unnailed, and the shoots and branches carefully tied into bundles, and drawn to stakes, from the walls, previous to laying on the mixture; it is of importance that all moss and lichens, &c., be scoured off from the face of the bricks, by rubbing them over with a free gritted stone, and water, or with an iron scraper, taking out all bad bricks, replacing them with sound ones, and repairing all the bad joints, &c. In laying on the color, it is of the greatest consequence that it be well worked into every chink, hole, and crevice in the face of the walls; for they are more effectually preserved from the frost and wet; and the hybernaculcum of insects are the more effectually destroyed, and will well repay to be repeated every second or third year.—*Hort. Reg. for January.*

ART. III. *Domestic Notices.*

Weather and Climate at St. Augustine.—Extract of a letter to H. Huxley & Co., dated Augustine, East Florida, February 23d, 1835.

You will like to hear of events at Augustine, and sorry I am to announce disastrous tidings. I believe I have eaten my last orange for some months. I had congratulated myself on escaping from the rigors of a northern winter, but alas! "from Scylla we fall into Charybdis." When I saw the accounts of the unheard of severity of your winter, I thought myself lucky to be here in Florida, but alas! on the 8th February, after a little rain, the wind veered to the north-west, and a keen frost set in, rivalling the severity of your general winter; thermometer stood at 8 above zero; water of all kinds froze in my room. You may perhaps be aware that houses in this city are built for the temperature of 60°; have few windows, terraced floors, air holes plenty; are therefore little adapted to such frosts as we have experienced. Prior to this unfortunate visitation all looked gay and cheerful, the beautiful green of the orange grove, sparkling with its Hesperian fruit (second crop), was a gladsome sight; the young blossoms were fast appearing, and in a few days we should have inhaled an Indian perfume, from the thousand groves around us; a few annuals had commenced blowing. Alas! how changed the scene. The trees are now of a yellow ochre color, the pendent fruit looks parboiled, and, worst of all, the shoots of last year's growth are all destroyed. How far the mischief may reach, I cannot say; the month of May will tell the damage; that it is extensive, there is no doubt, but at least $100,000 will not pay it. I have heard from one hundred miles South—the rattans and cane seed are all killed, so that sugar planters and orange growers share alike. St. Augustine was rising in wealth, and a stir of improvement was visible, but I fear that this will be a severe check to improvement. Groves that readily commanded $2000 to 3000, are now not worth a third of the value. On the 28th January, the thermometer stood at 72; on the 8th February, only 8 above zero. Do you furnish greater extremes at New York? There are a few specimens of hennequen agave here, but they would not stand the low temperature, they were killed. I have not yet heard whether this cold blast extended to latitude 26. I hope, for Dr. Perrine's sake, not; his statement of the climate of Augustine is very correct. I have not yet received the New York Farmer for February; will you see that it is forwarded to me.—*N. Y. Farmer.*

Preventive for the Turnip Fly.—On the 12th and 14th April, 1834, early cabbages and radishes were sown in drills in ground newly dug, and covered immediately by these millinett boxes, of which I have about sixty, but used only ten or twelve for this purpose, together with four hand glasses or boxes used for raising early melons and cucumbers—these boxes are like hot-bed frames in miniature, and contain four small panes of glass each. The plants came up and prospered equally well in each, or if there was any advantage, it was with those under the millinett. No flea or bug was seen, and the boxes were kept on until the plants were thinned, and the leaf so far advanced as to be out of the power of the insect. On the fifth of May, winter cabbages, savoys, and cape brocoli were sown, and treated in the same way, and with equal success. In both cases the bug did attack the plants after the covers were removed, but without any injurious effect. In the last case no hand glasses were used, and only ten millinett boxes, twelve inches square each, under which twice as many plants were raised as were wanted here, though no account of the number was kept.—*N. Y. Farmer.*

Peach Trees killed by the Winter.—The cultivators of the peach tree in New Jersey—where the business is prosecuted on a very extended scale—have suffered great loss by the severe weather of the late winter. The following paragraph is from the Woodbury, N. J., paper:

"Since our last we learn, from good authority, that in addition to the loss of the peach crop, both the bearing and the nursery trees are destroyed. It is supposed they were killed by the severe frost on the night of the 20th September last. It will require five years time to bring the peach crop to the same perfection it was last summer."

In the vicinity of Baltimore, we hear, the most extensive peach orchards will yield no fruit the coming season, in consequence of the frost.—*Farmer and Gardener.*

Flowers and Native Plants that bloom in March, in Charleston, S. C.—Our season has been unusually backward, and many native plants that commonly bloom in March have, as yet, scarcely made their appearance. We have noticed around our city the Cércis canadénsis and the Acer rùbrum, in full flower. The Chaptàlia integrifòlia, and three species of our native Violet—the Viòla cuculàta, villòsa and primulifòlia, and a Syngenesous plant, Gymnostyles stolonífera, growing sparingly at Hampstead, in the vicinity of Charleston. We have also observed the common Chickweed, Alune [?] mèdea, and the Gratiòla virgínica, and in our gardens, the Tulips, Ranunculus' Hyacinths, Stocks and Wall Flowers, Narcissus, &c. &c., have been very ornamental, though less so than in other years.—*Southern Agriculturist.*

Art. IV. *Calls at Gardens and Nurseries.*

We have made our calls at several of the Gardens and Nurseries, and have been gratified to observe the very rapidly increasing taste for Floricultural productions. New and beautiful plants have been added to several collections during the spring, and larger additions are expected. The present year, we think, will show a greater advancement in Horticulture than any previous one. We have been necessitated to make our notes as short as possible, in order to give place to our correspondents.

Charlestown Vineyard, Thomas Mason.—April. This place, so well known, and formerly under the superintendence of Mr. Haggerston, now gardener to J. P. Cushing, Esq., is undergoing several alterations. Mr. Mason has rooted out most of the vines which were planted by Mr. Haggerston, and have occupied the ground for several years. This he was induced to do, as they suffered from the mildew, and produced but very little fruit. He thinks the soil, which is a strong loam, rather prejudicial to them, and the great exposure of the place to the weather, the cause of their unproductiveness. He now intends planting several peach and plum trees, and to train them to the old grape trellises, (every other one of which, however, he has had removed,) thus giving the sun greater action upon the soil.

Mr. Mason informed us, that he had destroyed all the old strawberry beds, except one, and had replanted the healthy young runners, after manuring and well preparing the soil. The old beds had been planted several years, and had become overrun with grass, &c. The first Keen's seedlings in the country were introduced to this garden by Mr. Haggerston. The raspberry bushes, of which there is here a good stock, look well, and will produce a fine crop. In the house which was built for grapes and peaches, and which is without a flue, the plants have been almost wholly destroyed by the extreme cold of the last winter. The vines which are planted inside, Mr. Mason cut down even with the surface of the border. The peach trees are in bloom, but the flowers begin to fall, and the foliage to turn yellow. The cause must have been from the wood not being well ripened; as peach trees, out in the garden, have not been near so much injured.

In the green-house, the grape vines will be in blossom in the course of a few days. The main stems of the vines, where they enter the house, are too near the flue, and the great heat which was required to be kept up during the severe weather, has injured them materially. We would here suggest to those who are building green-houses, and intend to introduce grape vines, the importance of placing the front flue at least eighteen inches from the stems of the vines. It is impossible to expect a good crop, if their shoots are nearly dried up by the warmth from the flue, for half of the winter. Mr. Mason has the largest stock of that most desirable plant, the Tea Rose, that we have ever seen; we counted upwards of fifty flowers open. He has, also, two or three good plants of the yellow Tea.

Belmont Place, Watertown, J. P. Cushing, Esq.—We have but room to say, that the conservatory is now in its greatest elegance. The Geraniums are in the heighth of their splendor; among the numerous varieties, we noticed Mary, Queen of Scots; it is a late addition to our gardens, but it is one of very great beauty; it is somewhat in the style of the Washingtònian, but the petals of a brighter red, and the lines and stripes on the upper ones much darker; it has also the good properties of free growth, and fine foliage.

In the stove we observed in flower the Cyrtánthus obliqua, for the first time, we presume, in this vicinity. It is a most superb species of this elegant genus, belonging to the Amaryllideæ. The flowers are produced on the head of a stem about two feet high, and are pendulous, of an orange and green color, resembling, somewhat, in general habit, the Crown imperial, but not having that coarse appearance; the petals being of a very delicate texture, and the colors very bright. The vines coiled in pots, are showing a few clusters of fruit, but not equal to Mr. Haggerston's expectations.

Brookline, T. H. Perkins, Esq.—The grapes and peaches in the vineries, are now mostly in full bloom; in one house we noticed some trees which had on fruit of quite a large size. In the small pit mentioned in a former number (p. 74), Mr. Cowan will have ripe grapes in the course of six weeks. In the grapery, which Mr. Perkins has heated on the hot water system, with small pipes, the vines are growing vigorously, and showing fruit in abundance. It will be recollected, that these pipes burst early in the spring, just as Mr. Cowan had commenced forcing, which stopped all further progress at that time; he has since had them repaired, and in operation about a month; nothing, he informed us, can surpass this system for forcing; the heat is warm and bland, and is kept up to 75° with very little fuel.

In the green-house the vines on the rafters are showing a great crop of fruit; from the front to the top of the house, they present one continued line of clusters. Mr. Cowan's system of pruning is somewhat on the plan recommended by Mr. Russell in this number, (with the exception of cutting in every other vine). We here observed Erica verticillàta, longiflòra and grandiflòra in bloom; what an exquisitely beautiful genus is the Erica? if we could cultivate but one tribe of plants, it should be this. The Caméllias Mr. Cowan has removed from the green-house to one of the graperies; they are making a fine growth. Two or three species of the Rock rose (Cystineæ), were in full blossom; Rhododéndron punctàtum, a pretty species, with light purple or blush colored flowers, in globose heads, was very beautiful.

In the forcing grounds, Mr. Cowan has several frames, with melon plants just showing fruit: he cut the first cucumbers several days since. We are glad to see the improvements which are making at the various places. At Col. Perkins's some new fruit borders are being made, new walks laid out, &c.; and at Mr. Cushing's we found Mr. Haggerston busily engaged in clearing up the grounds, and improving the appearance of the garden and lawn.

Art. V. *Notices of new and beautiful Plants figured in the London Floricultural and Botanical Magazines: with some account of those which it would be desirable to introduce into our gardens.*

Edwards's Botanical Register, or Ornamental Flower Garden and Shrubbery. Each number containing eight figures of Plants and Shrubs. In monthly numbers, 4*s.* colored, 3*s.* plain. Edited by John Lindley, Ph. D., F. R. S., L. S., and G. S., Professor of Botany in the University of London.

Curtis's Botanical Magazine, or Flower Garden Displayed, containing eight plates. In monthly numbers. 3*s.* 6*d.* colored, 3*s.* plain. Edited by William Jackson Hooker, L L. D., F. R. A. and L. S., Regius Professor of Botany in the University of Glasgow.

We commence with the first Nos. of the volumes of the above works for 1835, to give our readers a description of such beautiful and interesting Plants as are figured in them, worthy of introduction into our gardens. We had this in contemplation when we commenced our Magazine, but deferred our notices until we should receive the Nos. of the present year. We believe they will prove one of the most interesting portions of our Magazine; next to the possession of a new or rare plant, is the gratification of reading of its great beauty and elegance, its habits and its character; and so far as we can aid in furnishing our readers with such information, it will be our endeavor to do so.

The works named at the head of this article, as well as all others of a similar character, are very expensive, and not likely to be in the possession of but few amateurs or gardeners. We shall therefore make such extracts and remarks as will give the reader as distinct an idea as possible of every plant.

We have arranged the different genera according to the natural system of Jussieu, taking the orders in course; this method, we hope, if not particularly benefiting all our readers, will not be read with less interest.

CLASS I.

Plants having distinct flowers and sexes.

SUB-CLASS I.

Exogenous or Dicotyledonous Plants, (with two seed leaves or cotyledons.)

DIVISION I. Plants with a polypetalous (many-leaved) corolla.

III. *Ranunculàceæ.*

ANEMONE.

vitifolia. *Wallich.* Vine-leaved Anemone. Grows about a foot and a half high; perennial; flowers white; a native of Nepal; increased by division of the root: figured in the Bot. Mag. t. 3376.

This according to the plate is a very beautiful species of the Anemone, very few of which are cultivated in our gardens. According to Dr. Wallich, "it is one of the commonest as well as most ornamental flower plants in Nepaul, where it grows in all the forests of the great valley and the surrounding mountains, delighting in the most shady, retired, and moist situations in the vicinity of rills and torrents."—*(Bot. Mag., January.)*

LX. *Proteàceæ.*

BANKSIA.

speciosa. *R. Brown.* Showy Banksia. Flower not very ornamental, but valued for its "beautiful foliage and graceful habit." Bot. Register, t. 1728.

This "rare species" has never flowered but three times since its introduction into England. It is a native of "Lewis's Island, on the south coast of New Holland."—*(Bot. Reg., Jan.)*

C. *Sapindàceæ.*

EUPHORIA.

Longan. The Longan tree. A tender stove plant; valued for its fruit; grows to the size of a large tree in its native climate (China); Bot. Register, t. 1729.

"The Litchi and the Longan are two of the finest fruits that the Chinese possess." Both are occasionally sent to England as presents, but they are never seen in the shops. They have, when imported, a brown shell, which in the former is prickly, in the latter simply warted, and contain a single seed surrounded in a succulent aril, having much the taste of an excellent Raisin, only more vinious." This species has never produced fruit but once in England.—*(Bot. Reg., Jan.)*

CXLIV. *Portulàceæ.*

CALANDRINIA.

speciosa. *Lindl.* Showy Calendrinia. An annual plant; very showy and beautiful; flowers from May to October; grows about six inches in height; propagated by seeds, in sandy loam; introduced from California to the London Hort. Society's garden in 1831; figured in Bot. Mag. t. 3379.

A beautiful species according to the plate, and highly desirable for the flower border. It is somewhat similar to the C. grandiflòra. Dr. Lindley states in the Bot. Reg. (July, 1834) that "when the sun is shining full upon it, with all its large, rich, crimson blossoms fully expanded, and reposing upon the soft, velvety bed formed by its succulent leaves, it is a most beautiful object." It should be grown in a dry situation, on a rather rich soil.

We introduced the seed of this species this year, and have distributed it among several amateurs. We have also ourselves, sown a small quantity of the seed, the plants of which are now flourishing finely.

CXLVIII. *Ficöideæ.*

MESEMBRYANTHEMUM.

rubrocinctum. *Haworth.* Red Eyed Fig Marigold. A green-house plant, flowers very profusely; color of the blossoms a purplish red; succeeds in a soil similar to the other species; figured in the Bot. Register, t. 1732.

"This," says Dr. Lindley, "may perhaps be considered the finest of this very extensive genus. It is nearly related to *M. spectàbile,* from which it differs in its larger flowers and leaves, and its connate bracts." It will resist as much cold as the Geranium (Pelargònium), and will consequently be a very desirable species. In England Dr. Lindley thinks it will endure mild winters in the open air; and in severe seasons it will only be "necessary to protect it with a few layers of matting from the wet."—*(Bot. Reg., Jan.)*

DIVISION II. Plants with a monopetalous corolla.

CCV. *Oleàceæ.*

SYRINGA *W.*

Josikæa. *Jacquin.* Lady Josika's Lilac. A hardy shrub; in growth similar to the S. vulgaris; it flowers in May; propagated by cuttings and suckers; introduced, we believe, in 1832; figured in the Bot. Reg. t. 1733.

"The addition to our gardens of a new species of Lilac, is an event of no little importance to all lovers of fine flowers and sweet odors. We are therefore happy to lay before our readers a figure of a plant which will probably be the most beautiful of the genus, on account of the deep color of its blossoms." The leaves are very dark green, nearly white beneath, and the flower of a deep stone-blue, disposed in a panicle less dense than the old kind. We should judge from the plate that it would be a splendid addition to *our* gardens. There is no hardy plant which should not be procured if possible; the present species is peculiarly fitted to our climate, as it is a "native of Transylvania, in the county of Klausburg, near Sebes." It grows in stony places upon the territory of the Countess Rosalie Josika, born Czaky, after whom it has been named. It was first made known to Botanists by Baron von Jacquin, at a meeting of Naturalists at Hamburgh in 1830. The S. vulgàris, thought to have been only indigenous to Persia, has been found growing on "all the rocks along the Danube, at the military boundaries of Moldavia, Szaszka, Csiklova, Krassova."—*(Bot. Reg., January.)*

CCVII. *Primulàceæ.*

ANAGALLIS *W.*

Monelli. *W.* var. Willmoreana. Willmore's Italian Pimpernell; a perennial like its parent A. Monelli; flowers all summer; increased by layers in peat and loam; raised from seeds introduced from Madeira; figured in the Bot. Mag. t. 3380.

A very beautiful variety of the pimpernell; raised from seed by Mr. Willmore, and was supposed to be a new species. Dr. Hooker, however, thinks it only a variety of the A. Monélli, and has so named it.—*(Bot. Mag., Jan.)*

CCXI. *Scrophularìneæ.*

COLLINSIA.

bicolor. *Bentham.* Two colored Collinsia; an annual plant; grows about a foot high; flowers in August and September; it grows in common garden soil; introduced from California in 1833; Bot. Register, t. 1734.

A "new and handsome hardy annual;" the flowers are purple and white; sent to the London Horticultural Society by Mr. David Douglas, where a few plants have been raised; it is, however, still very rare; it seeds plentifully, and will probably become as common as the C. grandiflòra.—*(Bot. Reg., Jan.)*

C. grandiflòra is not so well known as it should be; it is highly ornamental, and but little, if at all inferior to the C. bícolor.

SUB-CLASS II.

Endogenous or Monocotyledonous Plants, (with one seed leaf or cotyledon.)

CCXL. *Orchìdeæ.*

HABENARIA.

gigantea. *Smith.* Gigantic Habernaria; a terrestrial orchideous store plant; grows four feet high; with white flowers; introduced from Bombay; Bot. Magazine, t. 3374.

The orchideous plants are not much cultivated in our gardens, but we have mentioned this on account of its great beauty. We hope they will, however, ere long attract more attention, and the beautiful species which abound in this family, become familiar to our gardeners.

VI. *Quincy Market.*

Roots, Tubers, &c.		From $ cts.	To $ cts.
Potatoes:			
Common,	per barrel,......	1 25	1 50
	per bushel,.....	50	62½
Chenangoes,	per barrel,......	1 50	1 75
	per bushel,.....	62½	75
Eastport,	per barrel,......	2 00	2 25
	per bushel,.....	1 00	
Nova Scotia,	per barrel,......	1 37	1 62
	per bushel,.....	50	62½
Turnips:			
Common,	per barrel,.........	1 00	1 25
	per bushel (washed)	50	62½
French, per bushel,...........		50	75
Onions,	per barrel,.............	2 50	3 00
	per bushel,............	1 00	1 25
	per bunch,.............	5	6
Beets, per bushel,...............		70	80
Parsnips, per bushel,............		62	75
Carrots, per bushel,.............		40	50
Salsify, per dozen,..............		none.	
Radishes, per bunch,............		6	12½
Horseradish, per pound,.........		8	12
Garlic, per pound,..............		15	20
Cabbages, Salads, &c.			
Cabbages, per dozen heads:			
Red,..........................		75	1 00
Savoy,.......................		50	75
Drumhead,....................		75	1 00
Brocoli, per head:		none.	
White,.......................		none.	
Purple,......................		none.	
Cauliflower, per head,...........		none.	
Celery, per root,................		none.	
Lettuce, per head,...............		6	10
Spinach, per peck,..............		20	25

Squashes and Pumpkins.		From $ cts.	To $ cts.
Canada, per cwt...............		none.	
Common crook-neck,..........		6 00	
Lima,.........................		3 00	4 00
West-India,...................		3 00	4 00
Pot and Sweet Herbs.			
Parsley, per half peck...........		50	
Sage, per lb......................		20	30
Marjoram,.......................		50	
Savory,.........................		25	37
Spearmint,......................		80	
Fruits.			
Apples:			
Baldwins,	per barrel,.......	4 00	4 50
	per bushel,......	1 50	2 00
Pearmains,	per barrel,.......	none.	
	per bushel,......		
Russetts,	per barrel,.......	3 25	3 75
	per bushel,......	1 50	1 75
N. Y. Pippins, per barrel,....		3 50	3 75
Pears:			
Iron white, for baking,			
per barrel,..................		5 00	
per bushel,.................		2 00	2 25
Sweet baking, per bushel,.....		none.	
Old St. Germain, per dozen,..		none.	
Quinces, per bushel,...........		"	
Cranberries,	per barrel,.......	10 50	
	per bushel,......	3 50	4 00
Grapes, foreign, per pound,.....		none.	
Pine Apples, each,.............		25	50
Oranges, per hundred,.........		1 00	1 50
Lemons, per hundred,..........		75	1 00
Chestnuts, per bushel,.........		3 50	4 00
Walnuts,	per barrel,.........	4 50	5 00
	per bushel,........	1 75	2 00
Almonds, per pound,...........		12	14
Filberts, per pound,............		4	6
Castana, per pound,............		4	6

Remarks. The prevalence of the cold weather through the month, up to this time, has caused some advance on most of the principal articles. Large quantities have been shipped South, and the market appears to be much brisker than usual. Potatoes have been taken in large quantities for shipping, and although the stock here has been large, the prices have advanced considerably, and become more firm. Perhaps it will be thought that we exaggerate, when we state that nearly *twenty thousand bushels* have arrived since our last report. But such is the fact, and have been taken, by the cargo, at *fifty-five cents* per bushel. Turnips are doing better; those washed and fine in good demand. Onions, although the stock is much diminished, remain the same. Very few are now wanted. Radishes come to hand in abundance, and of better quality than former crops. The spring stock of Cabbages is nearly exhausted; but prices remain the same. Spinach is more abundant. Dandelions have been brought forward in large quantities, and sold at twenty-five cents per peck. Of Squashes there is but a small stock; a few fine ones we observed to-day, which were brought from New Hampshire; they had been kept exceedingly well. Some Limas are still in the market. The West India kind, are now generally taken. Sales of Apples are very brisk, and prices advanced; large quantities are wanted for shipping; pearmains are all gone. Pears for baking are yet to be had, but the demand for them is not great. Cucumbers we have not yet put in our quotations, but we observed a few to-day; they were held at fifty cents each. Cranberries are very scarce; the last were taken at $10,50 per barrel.

Boston, April 20th, 1835. M. T.

ART. VII. *Massachusetts Horticultural Society.*

Saturday, March 28th.—Exhibited.—By Thomas Mason, Charlestown, Azàlea índica, Phlóx subulàta, Camèllia sasánqua var. plena ròsea, Pyrèthrum, Cyclamen pérsicum, Roses, Geraniums, &c. &c.

From the conservatory of J. P.Cushing, Esq., Watertown, a splendid variety, including, among a large number of species and varieties, Echium supérbum, Ixia crocàta, Pittósporum tobíra and undulàta, Epácris grandiflòra, Eutáxia myrtifòlia, Gardènia flórida, Hibiscus ròsa sinénsis, Camèllia myrtifòlia, Petùnia nyctaginiflòra, Schizánthus pinnàtus, Asclèpias (sp?) and Erica ventricòsa. Some beautiful Roses of the Red Moss and White Unique varieties. Rosa odoràta var. lùtea, (yellow Tea;) several new Pelargòniums, among which was Mary Queen of Scots; Carnations, Pinks, Stocks, Oxalis ròsea, Sóllya heterophylla, Azàlea phœnicea, &c. &c.

From Messrs. Winship—A large number of varieties; among which were the Metrosidèros lanceolàta, Schizànthus, Maurándia Barclayàna, Roses, Geraniums, &c. &c.

From Messrs. Hovey—A fine hyacinth, called the Bouquet Tendre, or Waterloo; it had three spikes of flowers, numbering nearly fifty bells.

April 4th.—Exhibited.—Easter Beurré Pears, and Pinnock's Red Winter Apples.

April 11th.—Exhibited.—From Mr. S. Sweetser, Cambridgeport—Pæónia officinàlis var. rùbra plèna, Cyclamen pérsicum, Roses, Canary asters, Stocks, Hyacinths, Verbèna Aublètia, Agératum, Coronilla, &c. &c. A fine specimen of the Lilium cándidum, (White Lily,) from R. Rogerson, Esq.

From Messrs. Hovey—General Washington Hyacinth, with two spikes of flowers, one of which was nearly twelve inches in length; some of the bells measured two inches in diameter.

April 18th.—Exhibited.—Ròsa Thèa, Strómbio (a new superb French variety), by Messrs. Hovey.

ART. VIII. *Maryland Horticultural Society.*

AT a meeting of the Council of the Maryland Horticultural Society, Saturday, March 28th, the following proceedings were had, viz.:

Mr. Edward Kurtz exhibited a new and valuable Camèllia japónica, raised by himself, from seed, and now in bloom for the first time. The seed was from the old Waratah. Its form is that of the Anemone flowered or Waratah; the outer large petals, of a fine clear carmine, beautifully veined with a deeper tint of the same color and cordate; the centre petals white, with occasional sulphur tinges, and beautifully pencilled with deep bright pink—many of them edged with yellow. It is entirely distinct from any other variety that has yet appeared amongst us, and considered an addition to our ornamental collections sufficiently important to authorize special notice and distinction. Therefore,

Resolved, That it be named by the Society *Camèllia japónica Waratah Kúrtzii*—that a correct drawing be obtained of the flower, at the expense of the Society, and, together with a full description of the flower, be forwarded to the publisher of some Horticultural work, who may be willing to publish a colored lithograph of it.

Ordered, That the next annual Exhibition be held on the 27th, 28th and 29th May next, and that Messrs. Edmondson, Kurtz, S. Feast, John Feast, Dr. Cohen, E. Thomas, and Charles E. Wethered, be appointed a Committee to make the necessary arrangements.

Resolved, That a committee be appointed to make arrangements for publishing the proceedings and notices of the Society in the different papers, and that Joseph King, jr. and Dr. Cohen compose the said Committee.

Plants Exhibited. By Mr. Samuel Feast—Rhododéndron arbòreum hybridum. (This is a new and most splendid variety, produced from seed in Scotland, and sent to this country before it had shown flower, and now in bloom for the first time here. The head is thickly set with large flowers of a deep carmine, very clear and lively. It is considered a great acquisition.) Azàlea índica hybrida. (This also is a new variety. It differs from the cærùlea in the shape of the flower, which is of a better form, the two upper petals being longer; it is also more spangled; but the chief and most important difference consists in the number of flowers in the head, which in this is from five to nine, while in the cærùlea there are generally but one to three. The color of the hybrida is a rich pink, slightly tinged with blue.) Mr. Feast also exhibited twenty-seven varieties of Auricula, Genísta canariénsis, Coronilla glaúca, Hàkea salígna, Pittósporum undulàta, Acàcia augustifòlia and verticillàta, Erica verticillàta, Verbèna Melindris, [chamœdrifòlia,] Oxalis nova, &c. &c.

Saturday, April 11*th.—Exhibited.*—By Thomas Kehoe, gardener to Col. B. C. Howard,—A bunch of Rhubarb, and a fine head of Lettuce. Peter Naut, a bunch of Asparagus from the open ground; excellent for the season. By John Feast—Azàlea phœnícea Pæónia moután Bánksii, Alyssum saxátile, Cyclamen pérsicum, Pelargònium macránthon, gloriòsa, and fair Ellen; Geranium (sp.), Eupatòrium grandiflòra, Sparmánnia africàna; Acàcia armàta. By Samuel Feast—Azálea phænícea, Mímulus Smíthii, Schizànthus pórrigens, Cássia élegans, Ròsa Bánksia lùtea, Leptospérmum multiflòra. By Edward Kurtz—Azàlea índica ledifòlia, var. cærùlea and sp.—*American Farmer and Gardener.*

Art. IX. *Meteorological Notices.*

FOR MARCH.

The prevalence of cold weather through the month of March has been almost unprecedented. The cold has been accompanied with several squalls of snow and rain, and two or three times with thunder and lightning, unusual in March. The prevalence of the winds have been westerly, and nearly half of the month cloudy and unpleasant.

Thermometer.—Mean temperature 29° 3. Highest 60°—Lowest 6° below Zero.

Winds.—N. six days—N. E. five—S. E. one—S. two—S. W. eight—W. seven—N. W. two.

Character of the Weather. Fine nine days—Fair ten days—Cloudy twelve days.

ART. X. *Obituary.*

UNDER this head we intend to notice the death of those persons who have either themselves, or by their influence, promoted the advancement of Horticulture; and also to collect such information of the lives of eminent Botanists and Amateurs in Gardening, as will be read with interest.

We have now the painful duty to record the death of ROBERT SWEET, F. L. S., a very distinguished botanist and author, and one of the most successful botanical cultivators and propagators. He died on the night of the 20th of January, 1835, aged 52 years. The following notice we extract from Loudon's Gardener's Magazine for March:

He was born in 1783, at Cockington, near Torqua, Devonshire, of William and Mary Sweet. In his sixteenth year he was placed under his half-brother, James Sweet, then gardener to Richard Bright, Esq., of Ham Green, near Bristol (and afterwards the founder of the extensive nursery at the latter place), with whom he remained for nine years. He had, subsequently, charge of the collection of plants under the care of Mr. Stewart, at Woodlands, the residence of John Julius Angerstein, Esq. On Feb. 14, 1812, he was elected a Fellow of the Linnæan Society. In 1810 he entered as a partner into the Stockwell Nursery, which soon became famed for a collection of rare exotic plants; and, on the dissolution of that concern, in 1815, he became foreman to Messrs. Whitley, Brames, and Milne, nurserymen, Fulham; and remained in this situation until 1819, when he entered into the service of Messrs. Colvill, with whom he continued until 1826. Previously to this, he had become the author of some works, enumerated in the catalogue below; and the remainder will show that, from 1826 to June 1831, he had occupied himself almost wholly in producing botanical works. Still his passion for plant culture never ceased. In the garden attached to his residence at Parson's Green, Fulham, he cultivated a limited collection of interesting plants; and, he having removed, in 1830, to Chelsea, to a residence with a larger garden attached to it, we find him notifying, at the end of his *Hortus Britannicus*, his intention to "cultivate some handsome, rare, and choice plants for sale," at the wish of many of his friends, who had found "them at present so difficult to obtain."

In June, 1831, he was seized with brain fever, from which he partially recovered; but, having entered again too ardently into his favorite pursuit, he had a return of the complaint, which produced an aberation of mind, which continued till death.

The Dates and Titles of his Literary Works. In 1818, Hortus Suburbanus Londinensis, 1 vol. 8vo.——In 1820, Geraniaceæ, continued in numbers until 1826; 5 vols.——In 1822, The British Flower-Garden, First Series, continued in numbers until three volumes were formed, in 1826.——In 1825, or previously, the Botanical Cultivator. There have been five editions of this work: the fifth one, revised, was advertised in the end of 1830, and was published in 1831, under the title of "Hot-house and Green-house Manual, or Botanical Cultivator."——In July, 1825, Cistineæ, continued in numbers until completed, in January, 1830.——In 1826, The British Warblers.——In 1826, Part I.; in 1827, Part II., of Hortus Britannicus.——In 1827, The Florist's Guide, or Cultivator's Directory; continued in monthly numbers untill 1831. ——In 1827, Flora Australasica, continued in monthly numbers until 1828. ——In June, 1829, The British Flower-Garden, Series the Second; continued in monthly numbers, by its author, until June, 1831; and subsequently, and now, by David Don, Esq.——In 1830, Hortus Britannicus, edition the second.——In May, 1831, the first number of a work entitled "The Botany of Great Britain;" the descriptions by Mr. Sweet, the engravings by H. Widdell. See *Gard. Mag.*, vii. 345.

MONTHLY CALENDAR

OF

HORTICULTURE AND FLORICULTURE,

FOR MAY.

The weather during the month of April, has been very cold, and vegetation is quite backward. Scarcely anything has been planted. A few Peas and Potatoes have been put in, but only in warm situations. Unless we should have a very favorable autumn, crops will be small. In our last we recommended various things to be done, on the supposition that the weather the last month would have been as favorable as in seasons in general; but we believe the directions will apply to out door work nearly as well now, as for last month.

FRUIT DEPARTMENT.

Grape vines, will this month show blossoms, and will require more attention. As the flower buds begin to open, the house should not have so much air, and should be kept at a rather increased temperature. Grapes set much the best in a high moist heat. The vines should be syringed once a week, just before they flower, but until the grapes are set, syringing should be dispensed with; the paths may be sprinkled occasionally, to give a moisture to the air. After the grapes are well set, they should then be syringed two or three times each week, unless cloudy or rainy weather. Grape cuttings, in pots, put in as we have recommended, will have made shoots fifteen inches long, and should be repotted into the next size, and placed in the green-house, or in want of this, under a south fence or wall, protecting them with a mat, if cool nights occur.

New Strawberry beds, may be made this month; and if the transplanting is well done, they will produce some fruit this year, and a plentiful crop the next season. The Methven Scarlet and Mulberry, are large, and bear great crops. Keen's seedling and the Downton, are of superior flavor.

Gooseberry bushes, should be pruned this month; taking out the centre branches, and cutting out all small wood. If the ground was not manured well in the fall, it should now have a good covering, and forked up; being careful not to injure the roots.

Newly planted Trees should be tied to a stake, to prevent their being injured by the wind. All transplanting should be finished this month.

FLOWER DEPARTMENT.

Dahlias.—For their management, see pages 130 and 172.

Camellias, in the green-house, should be shaded with a mat, and be well watered, syringing the foliage every other day. Where they have been kept in parlors during the winter, they should be placed out in the open air, selecting a shady, sheltered situation, see pages 13 and 134.

Auriculas should be repotted as soon as done flowering.

Polyanthuses should be separated, where wanted to increase the stock.

Carnations, that have been wintered in a frame, should now be set in the borders, or in pots.

Tigridia pavonia and conchiflora may be now set in the open border.

Annuals should be sown this month. Make the ground fine, and sow in small patches. The following will be a good selection for a small garden:—Ibèris amàra and umbellàta, Calendùla pluviàlis, Calliópsis tinctòria, Silène armèria picta and péndula, Eschschóltzia califórnica, Amarántus caudàtus and hypocondriàcus, Argemòne mexicàna and Barclayàna, Petùnia nyctaginiflòra, Clárkia pulchélla and pulchélla var. álba, Œnothèra Lindleyàna, ròsea-alba and tenélla, Calceolària pinnàta, Cladánthus arábicus, Clintònia élegans, Schizánthus pinnàtus and pórrigens, Salpiglóssis straminea, Gomphrèna globòsa, var. álba and striàta, Sálvia augustifòlia Loàsa nítida, Verbèna Aublètia, Collòmia grandiflòra, all the varieties of Balsamines, ten week Stocks, zinnias, Morning glories, Lupins, Sweet Peas, &c. &c. See pages 101, 132, and 178.

Biennials and perennials should be removed this month.

Hyacinths that are just coming in bloom, (owing to the lateness of the spring,) should have their spikes of flowers tied to sticks, to prevent their being broken by the wind.

Tulips will now be advancing rapidly. An awning should be put over them, if choice kinds, to prevent the hot sun injuring their colors.

Roses should be pruned early this month. We would remind our readers who have a good variety, to cut them in short, as the flowers will be larger and finer, and the bushes much handsomer.

Cuttings of Ericas, Geraniums, China roses, &c., may now be put in.

Ranunculus beds, now coming in bloom, should be shaded, as their flowers last much longer than when exposed to the sun.

Chrysanthemum cuttings should now be put in, or the young suckers potted singly into small pots. p. 138.

Schizanthus plants, that were sown last month, should now be potted off. p. 177.

Seeds of the different varieties of *Salpiglossis*, may be sown in pots, and placed in a warm and sheltered part of the garden, where there is no green-house or hot-bed. They will do very well in this way.

Cuttings of Salvia splendens and fulgens may yet be put in; they will make strong plants by August. p. 59.

Verbena chamædrifolia plants, that have been wintered in the green-house, should now be turned out in the border, in a dry situation. No plant exceeds this, in the dazzling vividness of its scarlet flowers; and when planted in large patches, and the shoots pegged down to the ground, it is one of the greatest ornaments.

VEGETABLE DEPARTMENT.

Peas and *Beans* should be now sown for the main crop.

Windsor Beans.—These should be sown in a cool situation.

Celery plants, that have been raised in the hot-bed, should be pricked out in a warm border, till they acquire strength to set in the trenches.

Cucumber plants, in frames, grown as we have recommended each month, will now bear plentifully; keep the vines thin, and take away all yellow or decayed leaves; and stop them at every joint, which will make them show more fruit.

Asparagus beds will now begin to throw up their shoots. Gather with a sharp knife, and be careful not to injure the other shoots.

Radishes should be sown every fortnight for a succession.

Lettuces, now to be transplanted from the hot-bed, should be set in a very rich, moist soil; as the large heading kinds will not do well in a common dry situation.

THE
AMERICAN
GARDENER'S MAGAZINE.
JUNE, 1835.

ORIGINAL COMMUNICATIONS.

ART. I. *Notices of some of the Gardens and Nurseries in the neighborhood of New York and Philadelphia; taken from Memoranda made in the Month of March last.* By C. M. H.

[Continued from p. 166.]

Nurseries of D. & C. Landreth.—This fine establishment we were unfortunately deprived of the pleasure of seeing in our recent visit. In the fall of 1831 we walked through part of the grounds, and although we were then unprepared to take notes, yet we carefully observed several of the fine things which enrich this place—an account of which we think will not be uninteresting. What struck us very particularly at that time, was several fine hedges of the Arborvitæ of both species (Thùja occidentàlis and orientàlis), which were beautifully grown, and so thick that they completely screened one part of the garden from the other. We have never since seen anything of the kind at other places in that neighborhood, or in our vicinity; and when we observe the Arborvitæ in our gardens, it reminds us of this beautiful hedge, and we are astonished, that they are not made to take the place of many of the unsightly ones which exist in many gardens, disfiguring the grounds with their naked branches, and presenting, when divested of their foliage in the winter, a bare and scraggy appearance. The object of a hedge is generally to keep from the grounds cattle and other animals; though in some instances, they are only set to obscure one part of the garden from the other, or to hide some disagreeable object from the eye. In the latter case, we are sure nothing can be more desirable than the Arborvitæ; the beautiful deep green appearance of the foliage in the summer, and its cheerful and lighter hue in the winter, added to which its agreeable odor, at once give it a claim over any deciduous shrub. If the object of a hedge is entirely to keep out animals, we do not know how far the Arborvitæ may be employed; but few hedges have ever come under our observation which would answer this purpose any better than this, unless it were the Acàcia, the large and strong growth of which renders it unsuitable, except round extensive farms. We hope to see the Thùja more extensively grown, both in the pleasure grounds, intermixed with the spruces, firs, pines, and hemlocks, and also formed into hedges, especially when the object is to break the view of the kitchen garden, back entrances of the house, or any thing not in keeping with the scenery.

We here first saw that curious plant the Maclùra aurantiaca (osage orange), which retains its beautiful foliage until very late in the autumn. It is said to be an elegant object in its native clime (the Arkansas territory), being loaded with its golden fruit: when we observed it, it was full of green fruit; here was also fine plants of the Gordònia pubèscens, nearly related to the Camèllia; Cléthra acuminàta, and the Virgília lùtea. The green-house plants were not then placed in their winter domicils, but were disposed around the garden. The Orange, Lemon and Shaddock plants were in fine health, and full of fruit. We here saw a very large plant of the Rhododéndron arbòreum, which was then very rare. It has since become more common, and is to be found in most choice collections; yet we have never known it to flower, with but one exception, in our vicinity.

The Messrs. Landreths' nurseries are situated on Federal street, about two miles from the centre of the city, and altogether contain nearly forty acres of ground; part of which is devoted to the cultivation of vegetable seeds, which are sold at their seed establishment in Chesnut street. They have raised several beautiful seedling roses, and one fine Camèllia, of which Mr. Landreth showed us a painting; it is called Landrèthii. We believe one of the earliest collections of the Camèllia was first made by the Messrs. Landreth.

A floricultural work, in folio numbers, with four colored plates each, was commenced some time since by the Messrs. Landreth, the letter press of which was conducted by Mr. D. Landreth, Jr. Although we had never seen a copy of the work until our late visit, yet from a hasty glance, we should pronounce it a very excellent one, considering the present state of Floriculture in this country; the difficulty, however, attending the selection of a good Botanical draughtsman, and persons to color the plates true to nature, Mr. Landreth informed us, had induced them to give the work up; not, we understood, and gladly too, from want of patronage, but from the above causes; we hope to see them resume their work before long, with renewed exertions. Specimens of plants are certainly not wanting to render such a work not only useful and valuable to the amateur floriculturist, but a desirable one for every drawing-room or parlour.

R. Buist's Exotic Nursery, 12th, near Lombard street, March.—It is but a few years since this place was taken by Mr. Buist; it adjoins the one, which was owned and carried on by Mr. Thomas Hibbert; and so rapid was the increase of horticultural taste, that he extended his houses in a few years, to nearly three hundred feet of glass. Mr. Buist was latterly a partner in the concern, but upon the demise of Mr. Hibbert the plants were prized and sold at auction. Mr. Buist bought in such as he desired, and the rest were sold to various purchasers, commanding good prices. The widow of Mr. Hibbert now manages and carries on the place, some account of which will be found in the course of our remarks.

We were highly pleased with the neatness and high keeping of every part of Mr. Buist's establishment: he is a very modest, unassuming and intelligent gardener, and deserves the praise of every floriculturalist, for his industry, as well as his endeavors to introduce to our gardens, every thing which will add ornament or beauty. His establishment has been raised to its present state by his own individual exertions, since he has taken the place now occupied by him; Mr. Buist well understands his profession; his plants are grown uncommonly well, and his collection embraces a large number of species, including the most rare and choice kinds. In that department of gardening, the most useful, but generally the least understood by most gardeners, the propagation and multiplication of plants, he is very skillful; and the rapidity with which he has increased his stock of several species, is almost astonishing.

Mr. Buist wrote a large part of the American Flower Garden Directory, which appeared while he was in company with Mr. Hibbert. The character of the work is well known, and highly appreciated by those who have profited by its advice. A few years ago he visited Scotland, and on his return brought out with him many fine plants, which he has since increased, and are now to be found in our green-houses. The risk of importing many kinds of plants is so great, that few venture to introduce them; and unless some one, who understands their management, accompanies them on their voyage, and treats them with the most particular attention, they are almost sure to die. Mr. Buist succeeded in bringing home alive some species, which would, had it not been for his care, have long been strangers to our gardens.

The range of green-houses is upwards of one hundred feet in length; it is built with a span roof, though in some places it is not glazed, and is divided into five compartments; he intends enlarging it the present summer, and also to build a house purposely for his Camèllias, of which he has a very fine collection. The latter, he informed us he should build to face the north, as he thinks our hot sun altogether prejudicial to the health of the Camèllia; one thing we noticed in his compartment for his Camèllias, which we believe he recommends in the American Flower Garden Directory, was the *white-washing*, with a very thin coat, the whole under surface of the glass. We think, ourselves, that such a practice would give a more healthy and bright appearance to the foliage of Caméllias, than if the hot sun was permitted to shine on them all the winter; for whether it was to this alone, or to the general well appearance of Mr. Buist's plants, his Caméllias were in as flourishing a state as any that we have ever seen. Perhaps *ground* glass, in a house devoted wholly to Caméllias, would be superior even to the best and clearest crown; we should like to see the experiment tried; it is well known that they should be shaded from the sun from April to September; and we have no doubt but their flowers would last much longer, and preserve their colors better, were they so protected during the whole winter.

The arrangement of the plants throughout the whole range, is highly creditable to Mr. Buist's taste; and the general good order which exists throughout his establishment, where propagation is continually going on, is to be much commended. Too little attention is paid to neatness by many nurserymen. Commencing our walk through the houses, we were first delighted with an elegant specimen of the Erica rubélla, in full bloom; the flowers open at first a deep red and gradually change to a light blush; Mr. Buist valued this plant very highly; Metrosidèros lanceolàta, Acàcia longiflòra, and other species were throwing out flower buds. We here saw the Arbùtus Andràchne with its pretty flowers; it is a very desirable species of this elegant genus; Brùnia capitàta, another plant admired for its fine foliage and the graceful form of its pendulous branches. What riveted our attention more particularly was several species of the splendid genus Amaryllis, in full bloom; among them was A. psittacína, venústa, Johnsònia, formòsa supérba, &c. Mr. Buist has a very fine collection, which he cultivates with greater success than any we have ever seen.

The second compartment is used as a stove, and is filled with several rare plants. We here observed the Tropæolum pentaphyllum, the singular flowers of which so nearly resemble the shape of the canary bird, as to give it the name of the canary bird flower. It is now called Chymocàrpus pentaphyllus, and made the type of a new genus by Mr. D. Don; it is a native of Buenos Ayres, and was introduced into England in 1834; we believe it has flowered for the first time in this country at two different nurseries the present winter; it is easily propagated by cuttings, and will no doubt soon become common; Petùnia phœnícea, the most beautiful annual that has lately been introduced, Mr. Buist has a fine stock of; Mímulus Smíthii, we here also observed, but the blossoms were not near as large, or so distinctly and strikingly spotted, as those we saw at Mr. Pratt's. The pots were standing on the stage with other plants, and their want of vigor may be attributed to their not having been placed in pans of water. Fine plants of the Ficus elástica, Combrètum purpùreum, and Ornithògalum niveum, the latter throwing up dense heads of its snowy flowers; Fràncoa sonchiflòra, a new Chilian annual, though not as handsome as the F. appendiculàta, Mr. Buist has fine plants of; it has never flowered in the gardens in our vicinity, the seed having been this year introduced; Tecòma capénsis, with its climbing stems, was throwing out its clusters of orange red flowers. In this compartment a small pit was filled with cuttings of every description; it was placed on the north side of the stage, partially shaded from the sun, but receiving plenty of light from the glass on the north.

The third house is mostly filled with Geraniums, which are exceedingly well grown. Mr. Buist has a very choice collection, which with Mr. Hogg's of New York, may be said to be two of the finest in the country. We observed here the variegated stock, which we have not before seen since the fall of 1830, in the vicinity of N. York; Mr. Buist thinks it partakes of the variegated character from old age: although this may be the cause, still we are rather doubtful of the fact, as some of the plants we saw several years since were quite small, and could not have been more than one year old, and we have ourselves grown the various kinds of stocks to a considerable age, and have never had them sport in this manner. Corræa speciòsa, with its exquisite tubular shaped corollas, was covered with blossoms; Fùschia mycrophylla, and some other new species. In the next compartment, the last but one of the range, are placed Mr. Buist's Camèllias; the collection is very choice, and includes a large number of the finest kinds. We saw here C. gloriòsa, Goussònia, dianthiflòra, dahliaflòra, anemoneflòra àlba, althæflòra, Róssii, fùlgens, compàcta, conchiflòra, maliflòra, Fairlèa, &c., each with several blossoms fully expanded; C. Fairlèa is a very beautiful kind, the colors being red and white, mottled. Mr. Buist had three or four large plants of the maliflòra, one of which had expanded twenty flowers; it was a splendid object; the blossoms opening at the axils of several of the leaves near the top of each shoot, giving them the appearance of dense spikes; C. dahliaflòra is rather an indifferent variety; C. conchiflòra, though more common than several others, should be in every collection. There was a number of other fine varieties in full bud. We have mentioned before his practice of whitewashing the glass in this compartment, to prevent the hot rays of the sun from scorching and burning the leaves. A fine specimen of Rhododéndron arbòreum hybridum had expanded six or eight heads of its gorgeous flowers. What an imposing spectacle would a house present, filled with the different species and varieties of Camèllias and Rhododéndrons, including the true R. arbòreum, when in full flower? It would be the very acme of floricultural splendor. We hope that something of this kind will be attempted in our vicinity; for certainly the means or taste cannot be wanting to accomplish the object.

Mr. Buist has a fine collection of Roses, among which are some of the most beautiful kinds; he also has raised several from seed, which are known by the names of R. Webstèrii, Jacksònii, purpùrea, &c. The animated Daily is a very desirable rose, as it retains its form for many days, closing up every night, a peculiarity quite uncommon. The collection of Dahlias is very good, as they are also at several other nurseries in Philadelphia. Mr. Buist has also a collection of herbaceous Calceolarias, including eight or ten of the most showy varieties; he intends the present season to raise a large number of grape vines, and had collected together most all the valuable kinds.

Mrs. Hibbert's Florists' Nursery.—This, adjoining Mr. Buist's, and entered from 13th street, did not present any thing interesting additional to what we have just named at the latter place; we here, however, found two or three fine plants of the double white Camèllias, covered with blossoms. The collection of Geraniums and Roses is very good. We had not time to take particular note of what we saw, but considering that Mrs. Hibbert manages her establishment wholly by her own exertions, the plants look extremely well. The houses are built separately, though connected by entrances, and without any particular regard to the situation; some facing the south, and others the west. Mrs. Hibbert informed us she sold a large number of bouquets of flowers during the season; we should hope that those who are fond of flowers and plants in the city, and are purchasing, would not forget her claims to a portion of the public patronage.

There are several other fine private and public establishments, which contain many rich Botanical and Floricultural gems, which it was not possible for us to visit; among the former, was the garden of J. Longstreth, Esq., and the latter, Bartram's Botanic Garden and Nursery, now owned and carried on by Robert Carr. We regretted much that we could not avail ourselves of the pleasure of visiting his place. The collection of plants is very large, and as long ago as 1830, when the committee appointed by the Pennsylvania Horticultural Society, to visit the various gardens in the neighborhood, made their report, it contained thirty-six sorts of Camèllias. Mr. Carr has also a large collection of the Cácti. McMahon's Nursery, about three miles from the city, contains a rich collection of plants. It was established by the late B. McMahon, a distinguished and enterprising horticulturist, and is now continued by his family.

(*To be Continued.*)

Art. II. *On the Cultivation of the Gooseberry (Ribes Uva-crispa).*

By S. Walker.

> "August has upon his arm a basket of all manner of ripe fruits; as pears, plumbs, apples, *gooseberries*."—Peacham.

Miller states that the species are, 1. The common gooseberry. 2. The large manured gooseberry. 3. The red hairy gooseberry. 4. The large white Dutch gooseberry. 5. The large amber gooseberry. 6. The large green gooseberry. 7. The large red gooseberry. 8. The yellow-leaved gooseberry. 9. The striped-leaved gooseberry.

The varieties now best known are the red, yellow, green, and white; the following table will exhibit the six largest sorts of each color:—

Red.

1. Roaring Lion.
2. Huntsman.
3. Lord of the Manor.
4. Statesman.
5. Sir John Colgrave.
6. Royal George.

Yellow.

1. Gunner.
2. Viper.
3. Delight.
4. Duckwing.
5. Globe.
6. Rockwood.

Green.

1. Lord Crewe.
2. Troubler.
3. Tantararara.
4. Bang-down.
5. Favorite.
6. Conquering Hero.

White.

1. White Eagle.
2. Governess.
3. Wellington's Glory.
4. Cottage Girl.
5. Ostrich.
6. Nonpareil.

The above varieties have all taken many prizes, at the exhibitions, in England. The *Roaring Lion* has weighed 31 pennyweights, 16 grains (troy); *Gunner*, 27 pennyweights, 1 grain; *White Eagle*, 24 pennyweights, 18 grains; *Lord Crewe*, 23 pennyweights. Average weight of the six varieties of the *red* berries, 27 pennyweights, 1 grain; average weight of the six varieties of the *yellow* berries, 24 pennyweights, 19 grains; average weight of the six varieties of the *white* berries, 23 pennyweights, 11 grains; average weight of the six varieties of the *green* berries, 21 pennyweights, 10 grains; general average of the 24 varieties, 24 pennyweights, 1 grain. The large kind are generally not so well flavored as the smaller sorts. The best varieties for the table are the Red Champagne, Green Champagne, Hopley's Globe, Heart of Oak, Top Sawyer, Golden Gourd, Wellington's Glory, and the old Warrington Red. The gooseberry is, when fully ripe, a most delicious fruit, so much so that Gay makes it a favorite with that epicure the snail.

> "Upon a *gooseberry* bush a snail I found;
> For always snails near sweetest fruit abound."

The propagation of this well known genus is by suckers taken from the old plants, by layers, or by cuttings, the last of which is the best, as the cuttings generally form much better roots; the best time to plant the cuttings is in October or April; the cuttings should be taken from bearing branches, and should be from eight to ten inches long; plant them in a border of good light earth exposed to the morning sun, leaving two eyes above the top of the soil; if both eyes start, rub one of them off, leaving the strongest, which should be trained upright to form a regular stem; they should be watered if the weather proves dry. The bushes should be transplanted, into the places where they are designed to remain, the third year; the soil should be rich and light, in a free, open exposure; they should never be planted in the shade of other trees. An English writer on this fruit remarks, "In pruning these shrubs, common gardeners are apt to make use of garden shears, observing only to cut the head round, as is practised in evergreens, &c., whereby the branches become so much crowded, that what fruit is produced never grows to half the size it would do were the branches thinned and pruned according to rule."

I fully agree with the writer; pruning should be done with a knife, removing such shoots as cross each other or give the bush an unsightly appearance; some of the strong young shoots should be left every year, and a part of the old wood cut out; if proper attention is paid to pruning, the greater part of the wood in the bushes, at any time, will be only two years old, which will give much larger fruit than the old wood. I prefer leaving the shoots their full length; some persons cut them to six or eight eyes, but as this increases the number of new shoots, the air, so necessary for the well-doing of the plant, is prevented from circulating through the bush, and the fruit therefore becomes small and mildewed. Little good can be done with the gooseberry without judicious pruning; and with it, and the aid of a little manure, and digging up the soil once every year, much fine and delicious fruit may be obtained. Strewing a little air slacked lime over the beds every year, about the first of May, is very beneficial. Plant the bushes in rows eight feet apart, and six feet apart in the rows, keeping them clear of weeds.

Yours,

S. Walker.

Roxbury, 15th May, 1835.

The above paper by Mr. Walker will, we hope, be the means of greatly extending the cultivation of the Gooseberry. From prejudice, or from very little fine fruit having ever been seen in our market, they seem to be but very little esteemed for the dessert, and less cultivated than almost any of the eatable berries which are produced in every garden. The best varieties, when perfectly matured, are extremely rich, and high flavored. In England this fruit has been brought to a high state of perfection; the temperate and humid climate of several districts, seems admirably adapted to them. In Lancashire, where the greatest number of new varieties have been obtained, it is cultivated in greater perfection than any part of Britain. Many of these fine sorts have been introduced into this country, and although they have not come up to the size they have attained in England, yet they have been grown sufficiently large and fine to recommend them to general cultivation. Mr. Walker has twice received the premium of the Mass. Hort. Society for the largest and finest varieties; his hints on pruning are highly valuable, and we would recommend a careful perusal of his communication; the sorts he enumerates, are nearly all to be had in this vicinity.—*Conds.*

Art. III. *On Budding trees and shrubs;* by the Conductors; *to which is added the different modes of budding; and of herbaceous, or summer grafting, extracted from Loudon's Gardener's Magazine.*

The propagation and multiplication of the different species and varieties of trees, shrubs and plants, especially kinds of delicate growth, is, we believe, quite imperfectly understood, in this country. The common methods of grafting and budding have long been in practice, as almost the only means of increasing plants, unless it were those which propagate easily from cuttings, suckers, or division of the root. We have lately observed in some of the nurseries which we have visited, several methods in practice which were quite new to us, and which we should think, from the success attending the practice, would, if become extensively known, be the means of greatly facilitating the multiplication of many delicate kinds, which it has been found exceedingly difficult to increase to any extent.

With trees, the common method of grafting is generally adopted, and in budding, the old system is almost universally pursued. Very few attempts have been made to render practicable and successful, many of the new and more recent methods, laid down in most horticultural books, more particularly those in use by the French, who far excel even the English horticulturists in the multiplication of plants; this is owing to their knowledge in vegetable physiology, and to the various experiments which they are continually making for the discovery of some new method.

The following article we have extracted from Loudon's Magazine, with the hope that it will suggest some new ideas, as well as present some new methods upon budding and herbaceous grafting, which will not fail to be of great benefit to individuals, as well as to the public in general. It was translated from a Belgium work by Mr. Loudon, the indefatigable editor of the Gard. Mag., with some additions and alterations; but as we are sure it will be one of the most interesting articles in our present number, we present it entire.

"The following article we have translated, with some additions and variations, from *l'Horticulteur Belge*; and we present it to our readers as more complete than any article which has hitherto appeared on budding and herbaceous grafting in the English language. We have given the French names of the different kinds both of budding and grafting; not only because we think the doing so will be useful to gardeners who visit the Continent, or read French books on gardening, but because many of the terms are not translated literally. For example, the French apply the word *greffe* (graft) as a generic term including both grafting and budding; whereas the English, and also the Germans, use distinct words for these two kinds of operations. The Germans use the word *veredlung*, ennobling or improving, as including both grafting, *propfen*, and budding, *ocurliren*. In English we have no gardening word to express the two operations, although the word insition might be used for this purpose.

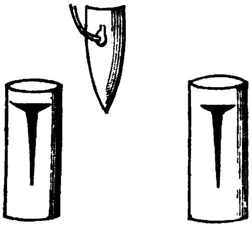
I. BUDDING. *Greffes par Gemmes.*

1. *Escutcheon Budding, without a Bud or Eye; Greffe en Ecusson sans Yeux.*—The object of this mode of budding is simply to cover a wound or blemish in one tree by the live bark of another. Take from a tree of the same sort, or at least of the same genus, as the wounded tree, a piece of bark rather larger than the wound, and form it into a regular shape; then cut the bark round the wound into the exact form and dimensions of the piece to be inserted, so that the latter may be let into the former with the greatest exactness. The inner bark of the graft and that of the stock being fitted so as to joint perfectly all round, and the shield closely adhering to the tree in every part, it is kept on by a ligature; and the edges of the wound are covered with grafting-wax or clay. It is a remarkable fact, which some are, perhaps, not aware of, that the wood formed under a piece of bark inserted in this manner, even though that bark be without a bud or eye, will be the wood of the tree from which the shield was taken. In this way several different kinds of wood might be formed on one tree, without introducing a single leaf belonging to those different woods. The portion of wood introduced will always be limited in diameter to the size of the portion of bark put on.

2. *Budding with a Bud or Eye, and a circular Escutcheon; Greffe en Ecusson par Inoculation.*—With the point of a grafting-knife, or rather with that of a penknife, cut a small bud out of the tree to be propagated, leaving a narrow rim of bark round it, and

taking, at the same time, a portion of the wood, which is retained. A hole is made in the stock, of the same size as the bud and its rim, and of a depth equal to the length of the piece of wood left on. The whole is adjusted so that the bud, with its bark and wood, fills up the wound exactly; and the edges are then covered with grafting-wax. This mode of budding is employed to equalize the flower-buds over a tree, by removing some, from where there are too many, to those parts of the tree where there are too few.

3. *Escutcheon Budding with Wood under the Bark; Greffe en Ecusson boisé. (fig. 6.)*—To procure the escutcheon, a deep and transversal incision is made above a healthy and vigorous bud; then, by withdrawing the blade of the grafting-knife, and entering it rather higher than this cross cut, a narrow strip of bark, three or four lines broad, by 1 in. or 1½ in. long, is taken away, terminating in a point at the bottom. The eye should be situated about a third from the top, and the stipules or other appendages that sometimes accompany the petiole, as well as prickles, &c., must be taken off with caution. With the point of the grafting-knife, the wood of the escutcheon is then taken out, leaving a small piece immediately under the eye, and about a third of the length of the escutcheon. The bud, thus prepared, is inserted in the stock, and then tied as before. This mode of budding is that most generally used in European nurseries.



4. *Escutcheon Budding, with a growing Bud; Greffe en Ecusson avec un Œil poussant.*—The escutcheon is cut and placed in the same manner as by the preceding method; but, as soon as it is inserted, the head of the stock is cut off, and all the buds that push from it, except that from the escutcheon, are rubbed off as they appear. This mode of budding, when done in the spring, has the great advantage of forcing the bud to develope itself immediately, thus gaining a year. However, it sometimes happens that, if the bud does not take, the sap of the stock not being able to find a channel, from all the shoots being rubbed off as they appear, the stock, or at least a great part of its length, dies of repletion. When done in the month of August, this mode of budding seldom succeeds, because the young shoot, not having time to ripen, perishes with the frost, and often causes the death of the stock.

5. *Escutcheon Budding, with a dormant Bud; Greffe en Ecusson avec un Œil dormant.*—This mode is similar to the preceding; but it is performed in August, and nothing is cut away from the stock till the following spring, in order to prevent the developement of the bud before that season. Though longer before it takes effect, this mode of budding is more certain to succeed than the preceding method. It has also the merit of not hurting the stock, if it does

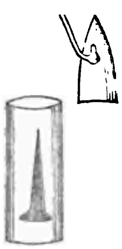
not take. The inhabitants of Vitry, who carry on the greatest commerce in fruit trees in the neighborhood of Paris, use it almost exclusively. This mode is that generally used in the British nurseries.

6. *Escutcheon Budding, without the Wood; Greffe en E'cusson dénué de Bois.*—According to this mode, all the wood is taken away except a speck immediately under the bud; to the life of which bud, however, that speck is essential. The rest of the process is as usual. Besides being very suitable for orange trees, this mode of budding is used for all trees having hard wood, such as myrtles, hollies, and all analagous species, whether indigenous or exotic. It can be done either with the growing bud or dormant bud.

7. *Escutcheon Budding, with Pincers; Greffe en E'cusson à Emporte-pièce.*—A pair of pincers ought to be made on purpose, with which a piece of bark is taken off the stock. With the same instrument, or with the blade of the grafting-knife, an escutcheon or plate of bark, having a vigorous eye in its centre, is taken off a young shoot of the tree to be propagated. It must be exactly of the same size as the wound made in the stock, in order to fill it with the greatest precision. When it is properly fixed, it is supported by means of grafting-wax or soft wax. This method is excellent for budding old trees, the thick and rugged bark of which is not suitable for the ordinary modes.

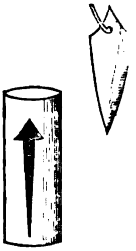
8. *Escutcheon Budding, with the Eye turned downwards; Greffe en E'cusson à Rebours.*—The escutcheon is cut in such a manner that the point of the eye, when placed on the stock, is turned downwards, whether the incision in the stock is made in the usual manner, or like a T reversed, thus, ⊥. By this method, the buds are forced to grow in a direction opposite to that which they would have taken naturally; but they soon resume their usual position; and the desired end, viz., that of increasing the size of the fruit by stagnating the returning sap, is thus by no means attained.

9. *Reversed Escutcheon Budding; Greffe en E'cusson renversé. (fig. 7.)*—The escutcheon is prepared in the form of a triangle; but instead of bringing it to a point under the eye, it is pointed above it. It will be perceived that the incision in the bark of the stock must be also reversed; that is to say, instead of being in the form of an upright T, it must be like a T turned upside down, as in the figure. To effect this, the longitudinal incision is made above the transversal one, instead of making it below it. It is finished with ligaments and grafting-wax, as the preceding modes. In comparatively cool and moist climates, like that of Britain, the grafting-wax may be dispensed with in such cases as this and the three or four preceding ones. This manner of budding is almost the only one used in the south of Europe, particularly at Genoa and at Hières, to multiply orange trees. It is also suitable for the propagation of trees having abundant and gummy

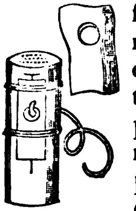


sap; and it might probably be advantageously employed to secure the success of buds on resinous trees.

10. *Budding resinous Trees; Greffe en E'cusson d'Arbres résineux. (fig.* 8.)—An incision is made in the form of T, as if for an ordinary bud, in the bark of the stock. A double incision is then made obliquely, about two lines or two lines and a half from the upper part of the T: this incision should penetrate the bark to the thickness of nearly a line, or so as to reach the soft wood. This mode of budding succeeds not only on resinous trees, but also on all those that have a gummy and very abundant sap.

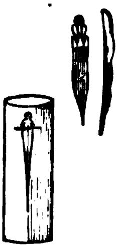


11. *Covered Budding; Greffe en E'cusson couvert. (fig.* 9.)—The bud is prepared as usual; but, when it is inserted in the stock, instead of a ligature, the lines of junction are covered with grafting-wax: a piece of bark is then taken from another tree, and, a small hole being made in the middle of it, it is placed on the escutcheon, so as to cover the whole of it except the bud, which appears through the hole, as in the figure. A bandage is then put over the bark to keep the whole together. This mode of budding is rather too intricate for ordinary purposes; but it may be worth adopting for rare and delicate trees.

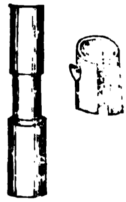


12. *Budding with a square Escutcheon; Greffe en E'cusson carré.*—Three incisions are made in the stock, one transversal, and the two others longitudinal, beginning on each side of the horizontal one, and descending perpendicularly four or five lines. They are to be four or five lines apart, and to represent a long square, the bottom line of which is wanting. This square strip or plate is raised and turned down. A square escutcheon, provided with a good eye, is then cut from a branch of the tree which is to be propagated, exactly of the same size as the plate stripped down the stock; and it is applied to the incision, which it must cover with the greatest exactness. This being done, the plate of bark, which was hanging down on the stock, is raised, and the escutcheon covered up to the eye; the line of junction is then coated with grafting-wax, and the whole is tied like other buds. It appears that this mode of budding was much used formerly, and that it succeeded perfectly: but, as it is rather tedious in the execution, it is now seldom employed.

13. *Escutcheon Budding, with a Portion of Terminal Buds; Greffe en E'cusson par Portion d'Yeux terminaux. (fig.* 10.)—A piece, measuring six or eight lines in length, cut from the top of a branch, is split in two, dividing the terminal bud exactly in the middle. An incision is then made in the stock in the form of a T, and the half bud is inserted into it in the usual manner. In case of need, the terminal eye might be divided into four equal parts. The



growing bud ought to be used to insure success, though this mode will sometimes succeed with a dormant bud. This method may be very useful, if the tree to be propagated has no young side shoots strong enough to admit of a bud being taken from them. It is particularly suitable for rare trees, with scaly buds and opposite branches.



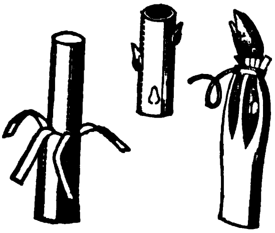
14. *Annular Flute Budding; Greffe en Flûte en Anneau. (fig. 11.)*—A branch is chosen on the tree which is to be propagated, as thick as, or thicker than, the stock, and a ring of bark, including an eye, is cut from it, and detached by splitting it perpendicularly on one side, and then separating it from the wood by inserting under it the spatula-like handle of the budding-knife. A similar operation is then performed on the stock; that is to say, a ring of bark, exactly of the same size, is detached from the stem in the same manner, but without caring whether there are buds on it or not. In its place is put the ring taken from the branch to be propagated, with the precaution of making the inner barks join together exactly both at top and bottom. No binding is applied; but the whole is covered with grafting-clay *(onguent de St. Fiacre)* or grafting-wax. Neither the branches nor the head of the stock are to be cut down till the bud has taken. The two periods most favorable for this sort of budding are, the time of the greatest movement of the sap in the spring, and at the end of its greatest movement in August. This mode of budding has the advantage of never mutilating the stock; because, if it does not take, the bark of the ring supplies the place of that taken away. It is not only suitable for the propagation of walnut trees, but also for the increase of all rare trees with hard wood, such as the American oaks and chestnuts.

15. *Split Flute Budding; Greffe en Flûte fendue.*—The only difference between this and the preceding mode is, that, if the ring of bark containing the bud is larger than the space prepared for it on the stock, a piece must be taken from it longitudinally, so as to make it fit exactly.

16. *Flute Budding by close Contact, Tube Budding; Greffe en Flûte par Juxtaposition, ou en Sifflet.*—The head of the stock being cut off, a ring of bark, 2 in. or 3 in. long, is removed. A shoot is then taken from the tree to be increased, of exactly the same thickness as the stock, and a ring or tube of bark is taken off the thick end, without being split longitudinally, not quite so long as the piece of bark taken off the stock, but provided with two or three good eyes. The tube thus formed is placed upon the stock in the room of the one taken away, and care is taken to make the two edges of bark join below. The part of the stock which projects over the ring of bark is next split into shreds, and brought down over it all round, so as, when secured by grafting-clay, to keep it in

its place. This mode of budding is chiefly employed in the south of France for propagating walnuts, chestnuts, figs, mulberries, and other trees with thick bark and abundant pith.

17. *Common Flute Budding; Greffe en Flûte ordinaire.* (*fig.* 12.)—The head of the stock is cut off; but, instead of removing a ring of bark, as in the preceding mode, it is cut longitudinally into four or five strips, each 2 in. or 3 inches long, and turned down as in the figure, being left still attached to the tree. From a shoot of the tree to be propagated, a tube of bark is taken, furnished with four or five eyes, rather shorter than the strips, though longer than in tube budding. When the tube of the scion is slipped on the stock, the strips of bark are raised over it, and fastened at the top by a ligature. This method of budding is in very general use both in France and Germany.



18. *Flute Budding in Shreds, with the Stock cut obliquely; Greffe en Flûte et en Lanière.*—This is nothing more than the mode above described, with the end of the stock cut obliquely, as shown at *a* in *fig.* 12, instead of being left to be afterwards cut into shreds and turned down over the tube of bark, as in tube budding, No. 16.

II. Herbaceous Grafting. *Greffe Herbacée.*

1. *Grafting upon fleshy or tuberculous Roots; Greffe sur Racines chranues ou tubcrculeuses.* (*fig.* 13.)—It not unfrequently happens that a tubercle of a georgina root is found without eyes; and, when this is the case, notwithstanding all the care of the cultivator, it may remain in the ground one or two years without budding, till at last it rots. This imperfection is easily discovered if the neck of the tuber is looked at attentively, for it is always there that the buds are found. In this case, as soon as a georgina bud upon some other tuber has begun to germinate, it is picked out with the point of the grafting-knife, and is taken away with a small piece of the tubercle adhering to it. On the neck of the barren tubercle a small hole is made, in which the bud is inserted, but in such a manner as that the base of the bud shall be perfectly on a level with the surface of the tubercle; and it is cemented with grafting-wax. The tubercle is then planted in a pot, taking care not to cover the neck on which the graft is, and the pot is plunged in a hot-bed under glass. When the graft has taken properly, the plant is turned out into the open border.

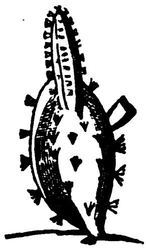
2. *Herbaceous Furrow-Grafting for vertical Shoots; Greffe herbacée en Raimure pour les Omnitiges.* (*fig.* 14.)—A bud with

a triangular slice of bark and wood, when in a soft or herbaceous state, is cut out of the scion, and inserted in a corresponding groove made in the stock, as shown in the figure; a ligature is applied, and afterwards grafting-wax. This mode of grafting succeeds both with the young wood of trees and with herbaceous plants, whether perennial or annual. M. Tschoudy gave the arbitrary name of *omnitiges* to those plants, all the shoots of which have an equal tendency upwards, and which, of course, are all equally suitable to graft upon.

3. *Herbaceous Grafting for Shoots with opposite Leaves; Greffe herbacée pour les Bourgeons à Feuilles opposées. (fig.* 15.*)* In the middle of the stem, between two opposite eyes, an angular and longitudinal incision is made, traversing the stem from one side to the other. The graft is cut angularly at its top and bottom, and it is inserted as in the figure. The binding, &c., is then put on as usual. This mode of grafting is suitable for those species of trees, and annual or perennial plants, the buds of which are opposite on the stem, which happens most frequently on the central shoots of plants. M. Tschoudy gives the name of *multitiges* to those plants, the central shoots of which have a tendency to rise more vertically than the lateral ones, and which have consequently more vigor; it is upon these central shoots that the grafts ought to be made.

4. *Grafting on the Stem of Annual or Perennial Plants; Greffe sur Tige de Plantes Annuelles ou Vivaces. (fig.* 16.*)*—The period chosen for this mode of grafting is that of the greatest vigor of the plant, that is, some days before its going into flower. The stem of the stock is cut through above a leaf, as near as possible to its petiole, and a slit downwards is made in the section. A shoot is then taken off near the root of the plant to be increased, the end of which is cut into a wedge shape, and is inserted in the slip made in the stock, taking great care of the leaf on the latter; for it is that which must nourish the cion until it has taken thoroughly, by keeping up the circulation of the sap. A bandage is applied, and the junction covered with grafting-wax, as before. When the graft has taken, which is ascertained by its growth, the ligature is removed, and the old leaf, and the shoots from the stock below the graft, are removed. M. Tschoudy grafted in this manner artichokes upon cardoons, and other plants on their congeners.

5. *Grafting on Succulents; Greffe des Plantes Grasses. (fig.* 17.*)*—Take a young shoot or leaf of a succulent plant (for example,



of a cactus or opuntia), and, cutting its base to a point or wedge, insert it in a hole or slit made in the stem or leaf of another species, but of the same genus.

6. *Grafting the Melon; Greffe du Melon. (fig. 18.)*—On the stem of a cucumber, or any other plant of the family of Cucurbitàceæ, but having some analogy with the melon, choose a vigorous part of a shoot having a well-developed leaf. In the axil of this leaf an oblique cut is made, of half its thickness. The point of a melon shoot, so far developed as to have its fruit quite formed, is then cut off, and pointed at its end, 2 in. below the fruit. It is inserted in the cleft made in the stock, always taking care to spare the leaf until the cion has taken. The remaining part of the operation is performed in the usual manner with ligatures and grafting-wax. This mode of grafting succeeds pretty well; but it has not hitherto been applied to any useful end. Tomatoes may be grafted in this manner on potatoes, and it is said that potato plants thus treated produce good crops both of potatoes and tomatoes.

Grafting-wax may be formed with turpentine, bees' wax, resin, and a little tallow, melted together. It may either be put on in the same manner as grafting-clay, but not more than a quarter of an inch in thickness; or it may be very thinly spread upon cotton cloth, and used in shreds like sticking-plaster. In this last state it serves both as a ligature for retaining the escutcheon or scion in its place, and as a covering for excluding the air. In very delicate budding and grafting, fine moss and cotton wool are frequently used as substitutes for grafting-clay or grafting-wax; the moss or cotton being tied firmly on with thread or strands of bast matting.

Art. IV. *Some Hints on Propagating the Tea Rose, by budding on hardy, strong Stocks.* By J. W. Russell.

Gentlemen,

Perhaps there are but few flowers in the whole range of Flora's dominions, so universally admired as the Rose. We become acquainted with it in our early days, and the delicious fragrance which is exhaled from this "queen of flowers," aside from its beauty, make it at once a favorite; and it never loses one particle of our admiration, until life becomes extinct.

There are but few difficulties to encounter with, in the propagation of this delightful genus of plants, especially the hardy kinds; as the greater part of them send up off-sets or suckers every year, which could be taken from the old plants in the spring or autumn, and transplanted to any part of the garden or pleasure ground where wanted to flower. Every well conducted nursery has what is called the stool grounds, for the propagation of roses, where all the sorts are judiciously arranged, and accurately named. Also, a memorandum is made of the colors of the flowers of each variety, so as to enable the grower to give a satisfactory answer to any enquiries made. But it is not my intention to treat upon the culture of hardy roses at present; the blush and yellow Tea roses, with their varieties, are my object.

As the tea roses are comparatively scarce in the vicinity of Boston, particularly the yellow flowering variety, and a few more sorts that are quite new, I beg leave to make a few brief remarks on their culture, which are the results of practical experience; if you think they are worthy of a place in your very excellent Magazine, you will please give them an insertion. Nevertheless, brevity may be the best part of it; but what I have to say, will, perhaps, be something new to a portion of your readers; the experienced gardener will be already acquainted with this subject. In the first place, I shall mention a few of the principal sorts that are highly spoken of, some of which are strongly scented with the *tea* flavor.

Ròsa Thèa odoràta. The blush Tea Rose. It is the most common sort, in the green-houses about this vicinity, but still we rarely or ever see a large, healthy, well-grown plant for sale.

R. Thèa odoràta, var. lùtea. The yellow-flowering Tea Rose. This is in great demand, and commands an extraordinary price. A few days since I endeavored to purchase, for a gentleman, at one of the nurseries, a variety of roses. The yellow tea was one of the number wanted; but the price named was exorbitant, and this, too, for a very small plant.

R. Thèa odoràta, var. Palavicina. Flower a bright yellow, inclining to an orange color, with a pink or red centre; a very beautiful kind.

R. Thèa odoràta, var. Anemòne. Flower blush or pink color. The last mentioned variety and this were flowered in the green-house of M. P. Wilder, Esq., Dorchester. This gentleman has a great taste for flowers, and his collection of roses and other plants consists of all that are choice and rare.

R. Thèa odoràta, var. stròmbio. Flower a most delicate blush; the bottom of the petals a cream color, and the inner ones striped with the two colors; strongly scented with the tea flavor, and of quite strong growth, when budded on a sweet briar or other strong growing stock, as was the case with the plant that I saw in the green-house of Messrs. Hoveys, Cambridgeport, who introduced it from France. I shall now add the names of a few more sorts that are in great repute, viz.:—

Thea Forquier,	Thea Florence,
—— Golconda,	—— Alba,
—— Moreau,	—— mirabalis.

The system I would recommend to be put into practice is, first to procure stocks of the most luxuriant growing sorts, viz.: the Common Sweet Briar, Greville, multiflóra, and Boursalt Roses; any of these will answer the purpose very well; select the best stocks, which should be of a fine clear growth, always *rejecting* those that have a meagre appearance; as the character of the stock, will undoubtedly add much to the beauty of the plant. It certainly would be a very splendid sight in a green-house or conservatory, to have either the blush or yellow tea rose, budded on any of the above mentioned strong growing sorts, with a stem perfectly straight, three or four feet in height, ramifying with four or five lateral growths. Where the blush, white, and yellow varieties could be, if so desired, inserted upon one stock, the whole, when in flower, would have an elegant effect, as the weight of the flowers would naturally give the whole plant a pendulous habit; by following this system, any person can have just such a plant as they choose, or as their mind would suggest to them; every intermediate height, from one foot to six or eight feet in the plant, could be thus very easily obtained. The whole of this is perfectly simple, and I think there are but very few amateurs or gardeners, who will not, from these few remarks, adopt the method I have recommended. The common China, may be budded in the same manner.

Yours, J. W. RUSSELL.

Mount Auburn, Cambridge, May 16*th*, 1835.

THE above communication, by Mr. Russell, will undoubtedly be read with interest by every lover of the Rose family. It is true, as he states, that Tea Roses, of all the varieties, are as yet very scarce in every nursery; and such as are to be found, mostly small plants. The idea of budding the Chinese kinds, on hardy, strong growing sorts, is probably new to many of our readers.

We have, however, had plants imported from France, budded in this manner, and their luxuriant growth compared with those on their own stocks, was truly astonishing. But the value of budding on hardy and luxuriant stocks, is the cultivation of all the tender China varieties in the open air. The fine effect of these, when budded on tall stems, is truly magnificent; we have copied the following sketch of a variety (fig. 19), the Bizarre de la China, taken when in full flower, from Loudon's Magazine, (Vol. VIII). It will convey an idea of the beauty of Roses when grown as standards, better than any description we could possibly give.

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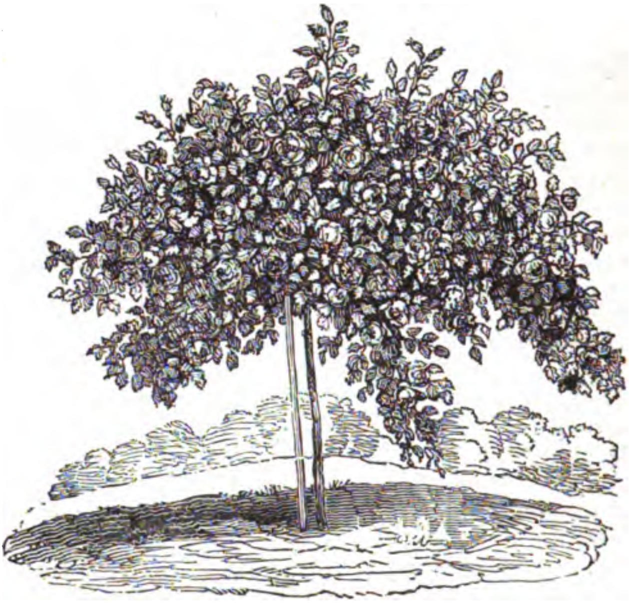


Budded on standards, they can be easily protected by laying down; in a similar manner of covering grape vines. During the last severe winter, they have been thus preserved in this vicinity, and the plants are now budding out, and promising a most profuse bloom. At another time we shall make some further remarks on the cultivation of China roses as standards in the open air; our article on budding and grafting in the present number, will be valuable to those who wish to bud stocks.—*Conds.*

Art. V. *Notices of new and beautiful Plants figured in the London Floricultural and Botanical Magazines: with some Account of those which it would be desirable to introduce into our Gardens.*

Edwards's Botanical Register, or Ornamental Flower Garden and Shrubbery. Each number containing eight figures of Plants and Shrubs. In monthly numbers, 4*s*. colored, 3*s*. plain. Edited by John Lindley, Ph. D., F. R. S., L. S., and G. S., Professor of Botany in the University of London.

Curtis's Botanical Magazine, or Flower Garden Displayed, containing eight plates. In monthly numbers, 3*s*. 6*d*. colored, 3*s*. plain. Edited by William Jackson Hooker, L. L. D., F. R. A. and L. S., Regius Professor of Botany in the University of Glasgow.

Class I.

Plants having distinct flowers and sexes.

Sub-class I.

Exogenous or Dicotyledonous Plants, (with two seed leaves or cotyledons.)

Division I. Plants with a polypetalous (many-leaved) corolla.

XXIV. *Malvàceæ.*

Hibiscus syriàcus variegàtus is figured in Paxton's Magazine of Botany for February; to which is appended the following remark on propagating the althæas:—"Plant the cuttings when the wood is nearly ripe in the autumn, in light sandy soil, and cover them with a hand glass. The best situation is on a somewhat shaded border, under an east or western wall, in preference to a south aspect. Shelter from the severity of the winter, and in spring the cuttings will grow freely."

Gazània pavònia (formerly Gortèria) is now displaying its deep orange flowers, at several places.

XXXII. *Ternströmiàceæ.*

Camellia japónica Fórdii, a new variety mentioned by us a short time since as having been lately originated in England (p. 116), is figured in Paxton's Magazine of Botany. According to the plate it is a splendid variety: the foliage and style of growth is similar to the myrtle leaved, which is said to be one of its parents. "It is, undoubtedly, one of the most perfectly formed Camèllias that has hitherto been produced. Nothing can surpass the regularity and symmetry of its petals, and the exquisite tint of its delicate rose-colored flowers." It was originated by Mr. William Ford, now deceased, who was one of the "most successful cultivators of Camèllias."—*(Paxton's Mag. Bot. for March.)*

Camellia hybrida, raised by Mr. Jacob Makoy, nurseryman, Liège, Belgium, is mentioned in Loudon's Magazine; it was "obtained from C. japónica var. insignis and C. euryöìdes as parents. In habit it assimilates to C. euryöìdes:" nothing is stated as regards its color.

XLVI. *Càcti.*

CEREUS.

grandiflòrus. *L.* Night blooming cereus. A green-house plant. Bot. Magazine t. 3381.

Well known in most gardens for its large, showy flowers, which open at eleven or twelve o'clock, at night, and by day light, are closed again forever. This is a most singular plant of the cacti tribe, displaying its superb and fragrant blossoms in the night. It has been described as

> "Queen of the *dark*, whose tender glories fade
> In the gay radiance of the noontide hours."

"The closing of the flowers may be retarded, as Mr. Murray has ascertained, even for a whole day, by removing the bud before it is fully open, and putting the cut end into wet sand."—(*Bot. Mag.*)

This plant flowered at the Botanic Garden in Cambridge, a year or two since, and was visited by several persons.

Cactus Ackermánii màjor, a new variety, was in bloom the latter part of last month, in the conservatory of J. P. Cushing, Esq., Watertown. It is a magnificent flower, expanding at least *six inches* in diameter, of a brilliant scarlet color. Cèreus speciòsus, and flaggellifórnis, are now in bloom at Messrs. Cushing's, Perkins's, and other places.

XLVII. *Onagràreæ.*

Œnothera sinuàta is figured in Curtis's Botanical Magazine, for March. (t. 3392.) It is the same as the minima of *Pursh. Fl. Am.* and *Nutt, Gen. Am.*, and the sinuàta of *Torrey, Mich.* and others; an insignificant species indigenous in our vicinity.—(*Bot. Mag., March.*)

LVI. *Myrtàceæ.*

Myrtus tomentòsa. This pretty species is now in full flower at Mr. Cushing's, Watertown. We hope to see it become better known, and in every green-house.

LXXVII. *Leguminòsæ.*

SOPHO'RA.
tomentòsa. *L.* Downy sophora. A native of Madeira; an evergreen shrub, growing to a considerable size; propagated from seeds; fig. in the Bot. Mag., t. 3390.

This plant has never yet flowered in England; the drawing was made in Madeira, where it is "a very ornamental shrub."—(*Bot. Mag., March.*)

ACA'CIA.
undulæfòlia. *Allan. Cunn.* Waved-leaved, variable Acacia. A green-house shrub; grows about four feet high, and much branched; flowers yellow; propagated, but not easily, from cuttings. Figured in Bot. Mag., t. 3394.

This species was discovered in New South Wales, by Allan Cunningham, in 1822. It was found "occupying arid spots, at elevations three thousand feet above the level of the sea. Although an inhabitant of districts, in which the temperature, in the winter months, is often reduced to the freezing point, and where even snow remains upon the surface for a short period, in seasons of unusual severity, for the latitude of that colony, it nevertheless requires, in this country

[England] the shelter of a green-house in winter." It was first raised from seeds at Kew. It is a very pretty species, resembling, somewhat, in the flowers, the A. armàta.—(*Bot. Mag., March.*)

INDIGO'FERA. (" Literally *indigo* bearer; some species producing the dye of that name.")
atropurpùrea. *Hamilt.* Purple flowered indigo plant. A stove shrub, from four to five feet high; a native of Nepal: flowers purple and crimson. Bot. Reg. t. 1744.

A beautiful shrub, as depicted in the plate. It will not succeed well in England unless cultivated in the stove; it might, however, grow in our green-houses. It is stated as "a handsome, light green bush, richly ornamented by its numerous bunches of purple and crimson flowers."—(*Bot. Reg., March.*)

CXXII. *Geraniàceæ.*

In Geraniàceæ we have lately observed at Mr. Cushing's, Watertown, and at the Botanic Garden, Cambridge, several new and splendid varieties. At the former place, the latter part of last month, we saw Pelargònium Yeatmaniànum, Dutchess of St. Albans, and Albinotàtum; the flowers of the first are beautifully clouded with dark purple, something similar to Yóungii, but much richer; at the latter place, Mr. Carter showed us P. involucràtum punigànum and albídum: all new and beautiful varieties. We have now in flower P. Napoleon, it is a white ground, very distinctly pencilled with deep red; P. Admiral Copley, gloriànum, Webstèria, Lord Yarboro' and De Vere, kinds we believe that are not in collections in our vicinity, will be in bloom in the course of the present month. We observe in Dennis & Co.'s catalogue for the year 1835, P. Dutchess of Sutherland, priced at £5. 5*s*.

CXXIV. *Tropæòleæ.*

TROPÆOLUM màjus var. átro-sangúineum, has been in flower with us for several weeks; it may be classed among many other annual plants that are valuable for their early blooming, when wintered in a green-house; we find it seeds readily in pots, although last season in the open ground we could not pick a single capsule of seed. At Mount Auburn where there were several plants, we believe not a seed was saved. It is a splendid variety, its deep blood colored flowers, which are very freely produced, forming a brilliant object.

CXLVII. *Crassulàceæ.*

SEMPERVI'VUM.
úrbicum. City Houseleek. A green-house plant; flowers from December to February. Propagated similar to the other species. Bot. Reg. t. 1741.

"A green-house plant, found commonly on rocks and the roofs of houses in Teneriffe, in inland parts of the island, where the air is damper than in the valleys." The panicle of flowers as represented in the figure, is nearly a foot in length, the color a bright yellow, and so dense that they touch together. "It flowers in the months of December, January and February; and is one of the handsomest of the shrubby species of this interesting genus." Introduced to England by Messrs. Webb and Berthelot; plants are for sale by Messrs. Young and Penny, Nurserymen, Milford.—*(Bot. Reg., Feb.)*

CLVII. *Begoniàceæ.*

BEGO'NIA.

geraniifòlia. *Hook.* Geranium leaved-Begonia. A stove plant; flowers red and white; grows about a foot high; introduced from Lima in 1833. Figured in Bot. Mag. t. 3387.

An interesting species discovered in Lima; and the roots brought to the Glasgow Botanic Garden in 1833. "In September of the following year, they produced their exceedingly pretty and very delicate red and white flowers, which contrasted well with the glossy and deep green foliage."—*(Bot. Mag., Feb.)*

Division II. Plants with a monopetalous corolla.

CLXX. *Ericeæ.*

Erica speciòsa, (?) a lovely little species, we saw in bloom the latter part of May, together with E. pubéscens, báccans, and others, at the Botanic Garden, Cambridge; the flowers of the first are white and extremely delicate; the foliage is also very fine, contrasting well with its small flowers; at Mr. Cushing's, Watertown, are also several species in bloom.

Azàlea indica phœnicea still remains in flower at several places; they will soon be succeeded by the deciduous species; A. trícolor, (a pontic species) has lately been in flower at the green-house of M. P. Wilder, Esq. Dorchester; and we are informed, was a splendid plant; A. speciosissima is now opening at the same place.

CLXXIV. *Campanulàceæ.*

CAMPA'NULA. (The English name *Bell flower*, and the latin *Campanula*, equally refer to the form of the corolla.)

fràgilis. var. hirsùta. Hairy-leaved brittle Bell-flower. A green-house plant; about six inches in height; flowers in summer; color a bright blue; a native of Italy. Bot. Reg. t. 1738.

"In its native stations it is one of the most lovely objects imaginable. Often have we heard travellers from Italy expatiating upon the beauty of the spots which are enamelled with the bright blue patches of this interesting stranger." Introduced from Italy to the garden of Mrs. Marryatt at Wimbledon, as the C. carolìni; but only proved to be a variety of C. fràgilis. It is a perennial, and found growing on limestone rocks, in the mild air and under the sunny skies of Naples; is not supposed to stand the winters of England; it may, however, live through our winters in arid places, as it only suffers from dampness.—*(Bot. Reg., Feb.)*

CLXXXVI. *Compositeæ.*

DIPLOPA'PPUS.

incànus. *Lindl.* Hoary diplopappus. A perennial plant, with purple flowers; flowering till late in October; a native of California. Bot. Mag. t. 3382.

The genus Diplopàppus is very nearly allied to Aster. "It includes, however, plants with a yellow, as well as purple, flowers, a color never known in the Aster." This species bears "copious flowers, of peculiarly bright colors, and continuing to blossom in the open border till late in October." Frame protection is recommended for it during winter in the climate of England. Discovered by Mr. Douglas in California.—*(Bot. Mag. for Feb.)*

WEDE'LIA.

aúrea. *D. Don.* Golden Wedelia. A perennial plant; grows about 18 inches high; flowers yellow; propagated by seeds; a native of Mexico. Bot. Mag. t. 3384.

Raised from seeds, received from Mexico, in the garden of the late Wm. Barclay, a gentleman to whom Botanists, as well as Floriculturists, are deeply indebted, for his aid in spreading a taste for these pursuits; an interesting species, but not so beautiful as many other of the Composíteæ.—*(Bot. Mag., Feb.)*

In Compositeæ, have lately been in bloom Cinerària cruénta, some species of Arctòtis, Senècio élegans, Pyrèthrum fl. pl. &c.

Gaillárdia aristàta, a perennial plant, should be in every garden; its showy yellow flowers are highly beautiful.

CXCV. *Asclepiàdeæ.*

Asclepias tuberòsa, an indigenous species, is figured in Paxton's Magazine of Botany for March; a very inferior figure however; we should be glad to see it more extensively grown in our gardens; we saw last year at the residence of T. Lee, Esq. Brookline, a large number of plants in full bloom. The bright orange colour of its blossoms render it highly beautiful, and it is easily increased, by division of the roots.

CC. *Polemoniàceæ.*

Phlóx ovàta, divaricàta, subulàta and other species, are now in full bloom; they are pretty border flowers, and valuable for their early blooming.

In our last number, p. 180, we stated Gilia coronopifòlia and G. pulchélla as annual plants; this error we did not perceive until too late for correction; the seed, however, where sown, will make much stronger plants for blooming next season, than if planted later. We have lately received several seeds of the G. coronopifòlia from two gentlemen, one residing in Georgia, and the other in Virginia; the following remarks we take the liberty to extract in relation thereto, from the letters which accompanied the seeds:—the following is from Georgia:—

"Càntua coronopifòlia [G. coronopifòlia] will bear a good deal of cold if dry; (witness last winter 6° below 0) but is impatient of dampness. The plants we have are self sown in the borders about in August. It sometimes grows with a flat stem three or four inches wide, and is then very striking. By pinching off the leading shoot, or rather the head of the plant, when six inches high, a thickly branching bush may be formed; but in the borders to my eye it looks best in a clump of about three to five plants with a single stem, six to seven feet high [generally with us only three or four], all trained to one stake."

The other from Virginia is as follows:—dated April 4th.—"The seeds which I send will readily vegetate, as some which I planted a few weeks since [in March] are already up and growing finely; there is no time lost, however, in planting them a few weeks hence in a situation, where they will not be retarded in vegetating. The plant is perfectly hardy, and will stand the winters, even of Boston [and vicinity], without protection, if they do not grow too large by Autumn. Mine were out the past winter, and are doing well, though the mercury was 10 or 12° below 0."

We shall try to make this species attain the height, and consequently the beauty above named. G. trícolor and achillæfòlia, are splendid annuals, as before stated by us.

CCVIII. *Primulàceæ.*

A new seedling variety of the Cyclamen we saw a few days since, raised by Mr. Carter of the Botanic Garden: it is similar to the C. pérsicum. We could not perceive any fragrance; Dodecàtheon mèdea we also observed in bloom; it should oftener be found in gardens.

CCIX. *Gesnèreæ.*

SINNINGIA GUTTATA. Spotted flowered sinningia. An elegant stove plant, we should infer from the plate; introduced into England from Brazil in 1826. Propagated similar to the gloxinias, by cuttings or leaves, in sandy peat and light loam, (*Paxton's Mag. Bot.* Feb.)

CCXI. *Schrophularíneæ.*

CHELO'NE.

centranthifòlia. *Benth.* Valerian-leaved Chelone. A perennial hardy plant; about 3 ft. high; flowers from June to Nov.; propagated by seeds; introduced from California in 1834. Bot. Reg. t. 1737.

A beautiful new hardy species, which much resembles the C. barbàta; it differs in having a larger and very graceful panicle, and more slender flowers; it is easily cultivated, "growing well in any soil or situation, if exposed to the sun, but best adapted to planting among American plants, from the midst of whose bushy masses its long panicles may rise like slender scarlet plumes.—"*(Bot. Reg., February.)*

CALCEOLA'RIA.

augustifòlia. Narrow-leaved Calceolaria. A half-hardy perennial; of dwarf habit; flowers yellow; a native of Peru; propagated by seeds and cuttings. Bot. Reg. t. 1743.

The following remarks by Dr. Lindley, in relation to the hybrid varieties, accompany this figure. "It is a species of no great attraction, but deserves to be recorded in this work, as one of the genuine wild forms of a genus, which, however beautiful and interesting, has already begun to sink in estimation, in consequence of the ruin that has been brought upon it by the unskillfulness of gardeners. In their haste to improve the works of nature, these gentlemen have converted some of the fairest races in the vegetable world, into forms in no case more beautiful than the original, and in a majority of instances unhealthy, mongrel, and debased. We strongly recommend all those who value this really beautiful and most singular genus, to abandon a pursuit which has as yet led to few results of which good taste can approve, and to apply the same skill which they have used in spoiling Calceolarias, to recovering the pure original races, to preserving them uncontaminated, and to increasing their native charms; not by unnatural combination, but by those well known methods by which the purity of a species may be augmented, while its vigor, health and beauty are augmented."

We have now in bloom, for the first time, a seedling plant, which we raised last season. It very nearly resembles C. integrifòlia, but the flowers are a paler yellow, and not so much compressed and much larger; it will be a great addition to our gardens.

PE'NSTEMON.
Richardsònii. *Doug.* Dr. Richardson's penstemon. A hardy perennial; grows about a foot high; color of the flowers purple; appearing from June to October; increased by seed and division of the root. Bot. Mag. t. 3391.

This is a very beautiful species; it is a native of Columbia, where it was discovered by Mr. Douglas. Introduced last season, and flowered in our garden until fall, and has stood the severity of the last winter unprotected; it is now growing vigorously, and will soon be expanding its rich purple blossoms, which continue to be displayed until October. A very desirable hardy perennial.

Mimulus lùteus rivulàris, has proved with us to be a hardy plant; having stood the severity of the last winter, without any protection; the situation was very low and damp. The plants are now growing well and will soon be in flower; if M. Yoúngii and variegàtus, prove to be as hardy, they will be the greatest acquisitions to our gardens, that have lately been made.

CCXIII. *Solàneæ.*

BRUGMA'NSIA.
bicolor. *Pers.* Two-colored Brugmansia. A shrubby plant; grows 5 to 10 ft. high; a native of South America. Bot. Reg. t. 1739.

A splendid species of the genus Brugmànsia, which has been separated from *Datùra* by Mr. D. Don. "It is on many accounts one of the most interesting plants that have yet been brought from South America." A very elegant species, according to the plate, and desirable to introduce; the flowers being very large and of a deep orange red color, inclining to a scarlet; it is found "near the village of La Cruz, on the banks of the river Mayo, between Almaguer and Pasto in New Grenada, where it was found by Humbolt and Bonpland, at nearly 7000 feet above the level of the sea." Requires protection during winter, and would probably, in our climate, if turned out of pots in the spring, bloom from June to November.—*(Bot. Reg., Feb.)*

CCXIV. *Acanthàceæ.*

In this order Ruéllia élegans, *Hook.* and Justícia cárnea, *Lindl.* are figured; the former was raised from seeds received from the East Indies. A very pretty species, supposed an annual, with bright blue flowers produced all summer. The latter is a splendid stove species, a native of Rio Janeiro; grows five feet high, the branches terminated with dense heads of flesh colored flowers; all the Justicias are showy and valuable plants for stove collections.

CCXX. *Verbenàceæ.*

VERBE'NA.
sulphùrea. *Don.* Sulphur-colored Vervain. A hardy perennial; grows six inches high; propagated by cuttings and layers; a native of Chili. Bot. Reg., t. 1748.

"Although not so conspicuous for its beauty as V. Chamædrifòlia, it is nevertheless a neat, pretty species, which demands a place in all select collections." We should think a bed of that little gem, the latter species, with its glittering scarlet blossoms, together with one of the V. sulphùrea, would present a pleasing contrast. We hope to see it introduced; found near Valparaiso, on the mountains.—(*Bot. Reg., March.*)

CCXXI. *Labiàtæ.*

GARDOQUI'A.
Hookèrii. *Benth.* Scarlet Gardoquia. A half-hardy plant; with orange colored flowers; a native of Florida; propagated by cuttings. Bot. Reg., t. 1747.

A very pretty species "half hardy, and half shrubby;" a native of Florida, according to Nuttall.—(*Bot. Reg., March.*)

We hope, if not already in our nurseries, (of which we are not aware,) plants will be procured from Florida, or introduced from England. Would probably require protection in our climate.

PHYSOSTE'GIA.
imbricàta. *Hook.* Imbricated physostegia. A hardy perennial; grows about six feet high; flowers from August to October; a native of the Texas; propagated by division of the root. Bot. Mag., t. 3386.

A highly ornamental, hardy, herbaceous plant; growing to the height of five or six feet, and producing spikes of flowers, through the latter part of summer and autumn. Very similar in appearance to Dracocéphalum virginiànum, which is common in our gardens: P. imbricàta is, however, "much taller, the leaves are broader and more numerous, and crowded, the flowers dense, nearly erect, and closely imbricated."—(*Bot. Mag., Feb.*)

CCXXII. *Boragìneæ.*

Lithospérmum rosmarinifòlium, *Tenore*, is figured in the Bot. Reg. for Feb., t. 1736. It is a native of the south of Italy, found growing on limestone rocks. Well adapted for rock work, and should be protected from wet in winter. "The blue of the flowers is of the most intense and brilliant tint."

It resembles, we should think from the plate, Cynoglóssum pictum, a hardy plant, which is now in blossom at Mr. Walker's, Roxbury, forming patches of its deep, azure blue flowers.

SUB-CLASS II.

Endogenous or Monocotyledonous Plants, (with one seed leaf or cotyledon.)

CCXXXVIII. *Amaryllídeæ.*

ZEPHRYA'NTHES.

spofforthiàna. *Herbert.* Spofforth Zephryanthes. A hybrid variety; flowers of a rose color; cultivated by offsetts. Bot. Reg., t. 1746.

A garden variety, obtained by the Honorable and Rev. William Herbert, from an intermixture of two species; thrives in a cool part of the stove.—(*Bot. Reg., March.*)

Pancràtium Amànaces, a rare, and exquisitely lovely, and delicate species of this fine genus, has lately been in bloom at Belmont Place, Watertown. The color of the flowers is a rich pale yellow, with a greenish tinge at the base of the petals, and somewhat of the Narcissus shape, though much larger, from which resemblance it is called Narcissus flowered. We infer, from what Mr. Haggerston informed us, it has never flowered in this country.

CCXXXIX. *Irídeæ.*

In this showy family, we observed in flower at the Botanic Garden in May, Gladìolus Colvillii, and G. tristus, both beautiful hybrids; at Mr. Cushing's, Watertown, a new species, in appearance like G. bizantinus, but with smaller flowers, a taller spike, and more graceful habit. G. natalénsis has proved perfectly hardy, having stood out through the last severe winter; this will render it doubly valuable, as it may, with the G. commúnis, G. bizantínus and others, be planted in beds or masses, in the open border. G. cardinàlis was stated, by a writer in the American Horticultural Register, as "hardly yet to be met with in the seed stores in Boston:" and that the bulbs "may be easily procured from Holland;" this we infer must be an error, as we have seen it in various catalogues for eight or ten years, and the plants have flowered in gardens around Boston several seasons.

CCXLVII. *Asphodéleæ.*

TRITO'MA.

Burchéllii. *Herbert.* Burchell's Tritoma. A perennial, hardy plant; growing two feet in height; a native of the Cape of Good Hope; increased by offsets. Bot. Reg., t. 1745.

A splendid species, and being hardy, a most desirable one to introduce. It blooms about midsummer, throwing up a stem, which is headed with a dense raceme of brilliant yellow flowers.—(*Bot. Reg., March.*)

REVIEWS.

Art. I. *The Gardener's Magazine, and Register of Rural and Domestic Improvement.* Conducted by J. C. Loudon, Esq , F. L. S. H. S. &c. In monthly 8vo. numbers, 1s. 6d. each. Nos. LIX. and LX. for February and March.

These numbers do not contain quite as much useful information to our readers, as several of the previous ones. The February number contains reviews of several works. The original articles in the March number, are chiefly upon collecting and cultivating the tropical orchideæ, which are now attracting great attention among the English Botanical amateurs. Splendid collections have been made by the London Horticultural Society, Messrs. Loddiges, Mr. Knight, H. Lowe & Co., and others. The various species are held at high prices, yet we hope their cultivation will, before long, be tried by some of our enthusiastic amateurs, some of whom are well able to introduce them, and to expend much in adding such a curious and highly interesting tribe of plants to our gardens. We have, ourselves, been exceedingly gratified in reading the accounts of excursions to collect plants, and in a review of a previous number of this work we made one or two extracts from Mr. Colley's Botanical researches in Guiana (p. 147).

The first article in the February number is the continuation of "Notes on Gardens and Country Seats," by the Conductor. The following account of the seat of Alexander Baring, Esq. M. P., we are sure will be read with great interest. The excellent hints in regard to the formation of avenues through parks, and approach roads to a mansion, should be read and remembered by those who are the fortunate possessors of a country seat, and would beautify it in a superior style. We are but in the infancy of Landscape gardening; and if we would progress rapidly, particular attention should be given to every thing which will tend to advance the science.

"*The Grange, Alexander Baring, Esq.—August* 19. The road to this place, over a country of downs, is dreary, and very uninteresting to a stranger. Andover, like an oasis in a desert, is a neat and clean town, affording a good and cheap inn (White Hart); but there are several miserable heartless-looking villages between that place and the long approach which leads to the Grange. The house here, however, repays all the trouble; and we have not seen a mansion the external elevation of which pleased us so much, since we commenced our tour. The beauties of this place lie in a narrow winding valley, with a small stream in the bottom, which spreads into a broad expanse of water near the house. The latter is proudly situated on a steep bank, supported by a grand architectural terrace, and that again by a massive terrace of gravel and turf, with a third smaller terrace, of the same materials, below. The main body of the house is in the Doric style, with a portico at one end, and a loggia with square columns on each side, by Wilkins; with a secondary mass, and a conservatory in the Ionic style, by R. C. Cockerell. An elevation has been already given (I. fig. 11. p. 106.); but it is on so small a scale, that it gives no adequate idea of the simplicity, grandeur, and beauty of this mansion. Scarcely any picture, indeed, can do justice to it: its temple-like magnificence must be seen to be felt; and, indeed, it will repay any one who has a taste for architecture, to travel a hundred miles out of his way to see it. We shall never forget the first impression made on us by the Doric portico, when we saw it from the road to the kitchen garden, on the bank forming the opposite side of the valley. The Ionic conservatory is the finest thing of the kind in England; and, in our opinion, far surpasses those of Syon and of Alton Towers. Its characteristics are simplicity and grandeur. We do not know that we can find a fault with the house, unless it were that the chimney-shafts of the main body are not architectural enough; and that those of the addition by Mr. Cockerell are altogether concealed. This part contains the kitchens; and the roof being unseen as well as the chimney-shafts, the smoke appeared to us as if ascending from ruins, or from a fallen-in roof. This bad effect is, in our opinion, a sufficient argument why chimney-shafts should, in all cases, be shown; but if they are to be concealed in one part of a house, they ought to be concealed in every part of it, for the sake of unity of system. (See *Arch. Mag.*, II. 33.) There is also a petty little wooden excrescence to the entrance loggia, which conveys the idea of a porch to a London banker's counting-house, rather than the portico of a villa. There ought here, as in every large country villa, to have been a projecting portico to drive under, as at Bear Wood, and at Eastwell Park by Bonomi. Notwithstanding these trifling faults, and the alleged unsuitableness of the severity of the Doric order for a villa, we cannot help admiring the Grange as one of the noblest of British villas. The approach to the entrance front is through an avenue of lime trees, 100 ft. wide, and twice as many years old; having, as we are informed, been planted in the time of Inigo Jones, who built the first house, nearly on the present site, for Lord Chancellor Hyde. The road has the great fault of descending to the house; but, as the fall is not above 3 feet, it might easily be remedied by lowering the surface. An avenue, to maintain a character of art, should not only be in a straight direction, or in a direction composed of geometrical lines; but it should be over a surface of geometrical forms: that is, the surface should either be level, of an even slope, or, as far as practicable, of regular swells and declivities. It should never assume a direction, or pass over a surface, which could be supposed to be natural or accidental. If the conducting of an avenue over such a surface, and in such a direction, is found, in any case, to be altogether unavoidable, then, to maintain the character of art, recourse must be had to foreign trees, most studiously arranged. Onr readers will observe, that these remarks on the subject of avenues have reference to our principle of the Recognition of Art; a principle which we find to be of the utmost value, both in landscape-gardening and in architecture. By this principle, we are enabled to determine many points which were before involved in uncertainty, chiefly from the difficulty of deciding what was meant by the imitation of nature. The result will be, when the principle is properly understood, a greater unanimity of judgment on matters of taste than has ever heretofore been displayed."

ART. 2. *On Cottage Allotments.*

A good article, but not containing information useful to our readers.

ART. 3. *Design for a Gardener's House.*

ART. 4. *Design for a Kitchen Garden of seven acres.*

An excellent design, being No. 8 of a continuation of series by

T. Rutger. We hope during the season to give similar plans for laying out small gardens.

Art. 5. *Description of some of the Magnolias grown at Harringay House.*

"*M. conspicua.*—This fine tree is 25 ft. high, and 16 ft. across; the circumference of the stem, at 1 ft. from the ground, is 2 ft. 8 in.; its age is, also, twenty years. In the spring of the year, it presents a most beautiful appearance; for I think we may calculate on having at least 2000 blooms on it this next season.

"*M. soulangeàna.*—This is a very fine tree, considering the short time it has been in this country. About six years ago, it was inarched on a strong plant of M. cordàta, which was planted at the same time as the others. It is now 20 ft. 6 in. high, and 16 ft. across. The circumference of the stem, at 1 ft. from the ground, is 1 ft. 1 in.

"The situation of these trees is on the top of a hill, in an aspect nearly south. The soil, which is a sandy loam, was trenched to the depth of 5 ft., and nothing put among it, except a little bog earth round the roots of the plants when planted. The subsoil on this spot we have not been able to prove, never having gone down deeper than 20 ft.; but to that depth it is all sandy loam. All the rest of our ground has a subsoil of strong clay.

"Owing to the wall against which the trees are planted being rather short, they have not room to spread out as they otherwise would do. I should think that M. conspicua and Soulang*eàna* would extend, each of them, 3 ft. more each way. The probable height, at ten years old, of all the trees was rather more than one half the present height."

The remainder of the February number is filled with reviews of various works, among which are the Complete Farmer, a new edition of which has just been published.

"Though this volume," says the reviewer, "is, for the greater part, compiled from British publications, yet there is enough in it to enable us to form some idea of the state of agriculture in the United States. The most remarkable feature is, the great number and variety of the implements and machines in use. This forms a very striking contrast to the infant state of agriculture in Britain, where, a century ago, there was not more than one kind of plough, cart, or harrow in use throughout the whole of Scotland, and only two or three sorts in England. The cause of this difference is easily accounted for; the Americans are full of intelligence, and the high price of labor obliges them to seek aid in improved machinery."

The review of a "Journal of a recent Visit to the principal Vineyards of Spain and France, by Mr. James Bushby," occupies several pages; after detailing a variety of practices in the cultivation of the grape in the southern part of Spain, he concludes with the following excellent and truly valuable observations:

"Having recorded with so much minuteness my observations on every vineyard and district through which I passed, I will avoid adding to the length of this journal by offering many general remarks. I cannot, however, refrain from observing, that, from the albarizas of Xeres, the most southern vineyards of any reputation in Europe, to those of the chalky hills of Champagne, amongst the most northern, I met with no vineyard producing dry wines of reputation which was not more or less calcareous. Although it is acknowledged that two thirds of the vineyards of France are situated upon soil more or less calcareous, by Chaptal, and other writers upon the subject, they have stated that, provided the soil is porous, free, and light, its component parts are of little consequence; and they enumerate granitic, schistose, argillaceous, flinty, sandy, and calcareous soils as equally well qualified to produce, and as actually producing, in different parts of France, wines of the finest quality. It appears evident to me, however, that these writers have, in many instances, been misled by the representations which have been transmitted to them: as, for instance, when Chaptal and Cavoleau cite the wine of Hermitage as an instance of the excellence of wines produced upon the debris of granite; while the fact is, that the wine of the hill of Hermitage owes its superiority over the wines of the other hills in its neighborhood only to the circumstance of the granitic soil of a part of that hill being mixed with calcareous matter; and, but for this circumstance, I am satisfied that the wine of Hermitage would never have been heard of beyond the neighborhood where it grows. I am therefore of opinion, that the finest dry wines owe their superiority chiefly to the quality of the soil; and I am much mistaken if it be not found that the soils of all vineyards producing dry wines of superior excellence are strongly calcareous. All my observations have led me to this conclusion, and I know of no instance to the contrary. It will be observed, that I here only speak of dry wines, for sweet wines of great excellence are produced in a variety of soils, and, in fact, owe their qualities more to the variety of the grape, and the manner in which it is treated, than to the soil. The sweet *Muscat* and *Old Mountain* wines of Malaga are celebrated all over the world; but though they have the same varieties of vines at Malaga as at Xeres de la Frontera, and pursue a similar practice in making the wine, the best of their dry wines, produced on a soil consisting of decomposed slaty schist, are insipid and flavorless when compared with the Sherries which are produced on the chalky hills of Xeres. The sweet wine of Rivesaltes, the most celebrated in France, is produced on a granitic soil covered with pebbles; and the sweet wines of Cosperon and Collioure, in the same department, are produced on hills of schist, as nearly as possible resembling those of Malaga. But though the dry wines of both these soils are well known, they are not distinguished for their fineness or flavor. Their excellencies are their strength and rich color, which make them valuable for mixing with the weak and light-colored wines of the ordinary growths of Burgundy and Maçon which supply the chief consumption of Paris.

"The limited extent of the first-rate vineyards is proverbial, and writers upon the subject have almost universally concluded that it is in vain to attempt accounting for the amazing differences which are frequently observed in the produce of vineyards similar in soil and in every other respect, and separated from each other only by a fence or a footpath. My own observations have led me to believe that there is more of quackery than of truth in this. In all those districts which produce wines of high reputation, some few individuals have seen the advantage of selecting a particular variety of grape, and of managing its culture so as to bring it to the highest state of perfection of which it is capable. The same care has been extended to the making and subsequent management of their wine, by seizing the most favorable moment for the vintage—by the rapidity with which the grapes are gathered and pressed, so that the whole contents of each vat may be exactly in the same state, and a simultaneous and equal fermentation be secured throughout—by exercising equal discrimination and care in the time and manner of drawing off the wine, and in its subsequent treatment in the vats or casks where it is kept—and, lastly, by not selling the wine till it should have acquired all the perfection which it could acquire from age, and by selling, as the produce of their own vineyards, only such vintages as were calculated to acquire or maintain its celebrity. By these means have the vineyards of a few individuals acquired a reputation which has enabled the proprietors to command almost their own prices for their wines; and it was evidently the interest of such persons that the excellence of their wines should be imputed to a peculiarity in the soil, rather than to a system of management which others might imitate. It is evident, however, that for all this a command of capital is required, which is not often found among proprietors of vineyards; and to this cause, more than to any other, it is undoubtedly to be traced, that a few celebrated properties have acquired, and maintained, almost a monopoly in the production of fine wines."

ART II. *The Horticultural Register, and General Magazine of useful and interesting Discoveries, connected with Natural History, and Rural Subjects.* Conducted by J. PAXTON, F. L. S. H. S. In monthly octavo numbers, 1s. each. For March.

THE March number of this work contains a long and excellent article on the cultivation of the celery. It suggests to cultivators of this delicious vegetable, a new mode of blanching, and, also, explodes the old system, so firmly rooted in the minds of most farmers and gardeners, of setting the roots in trenches, so deep that they have nothing to nourish themselves with, unless it were the cold, stiff subsoil of the low situations, which are generally selected for growing the plants. The cultivation of celery, we have long been aware, is little understood in this vicinity, as is apparent to every observer, by the weak and stinted growth of the roots which are offered for sale in our markets. Instead of that tall, stout, erect growth, and crispy appearance, which are part of the qualifications of celery roots, they are invariably one mass of short, slender, pithy stems, not much larger than a quill, and each root divided into innumerable offsetts, not generally weighing more than one or two, or, at the most, three pounds each.

The method of growing in trenches, was as much practiced with the English horticulturists a few years since, as with our gardeners at the present time; but lately, the various articles which have appeared in their Magazines, have awakened attention to the subject; and, except where prejudice still exists, the old system is entirely given up. A gardener was once even thought visionary, and wholly unacquainted with his profession, who should suggest the idea of planting celery, in the same manner of other vegetables.

"When a mere tyro," says this correspondent, "in a Gentleman's Garden, a severe rebuke received, for presuming to suggest the propriety of planting Celery in trenches less deep than those which immured every leaf of the plant beneath the level of the circumjacent earth, dwells yet fresh upon the memory. To harsh language, threats were added, *for daring to think*, yet thought revelled unconfined, although the tongue was chained by the iron hand of tyranny! and meditation urged on to experiment which fully realized my buoyant hopes, and brought conviction of the justness of my young idea."

An article in the Horticultural Register three years since, first called our attention to this practice; we then first read of celery roots weighing ten and twelve pounds each, and immediately perceived the reason why we never had grown it to such perfection. The error of planting in trenches, at once recurred to our minds, and we have since planted at less depth, and procured much finer roots. The future experiments which we shall make, will, we hope enable us to give our readers considerable information on the subject.

A writer in the American Horticultural Register, for January, has offered some remarks on the cultivation of celery, recommending the old method of cultivation; as this might mislead many amateurs and gardeners, or at least confirm their opinions in the old way of raising this vegetable, we had intended to have inserted a communication in an early number of our Magazine, and were preparing one, when the March number of Paxton's Horticultural Register came to hand. The excellent hints in an article on the celery, contained therein, induced us to adopt them in place of our proposed communication. At some future opportunity we shall resume the subject. The writer in the American Horticultural Register, says:—

> "By the first of July they will have attained sufficient growth to be removed into trenches, which should be prepared in an open, well exposed spot, by digging them two spades deep and two and a half feet wide, leaving three or four feet distance between the trenches; on this space is to be piled up, like a bank, the earth taken from the trenches. Put about four inches of good manure at the bottom of each trench, and dig it in; take up the plants, and previous to putting them into the earth, trim the roots very carefully, being sure to cut off the end of the tap root, and eradicate all little shoots and radicles, where the heart joins on to the root, as these shoot up and produce that mass of small heads, seen in our markets, instead of one large, solid, handsome plant; place them about three inches distance and water well for the first week. As the plant grows, gently fill in the trench with the earth on each side, taking care not to throw in large lumps, which twist and contort the celery, and spoil its beauty; and continue earthing up until there is a bank above ground as high as the trench was deep."

This is precisely the common mode pursued by every gardener, with no alteration that we can perceive; in the following extracts from Paxton's Register, the proper method is fully detailed:—

> "The Manchester gigantic Celery," says the writer, "has long borne away the palm, and won the laurels of celebrity, throughout England, for its size, weight and quality;—how has my young heart panted to know the reason, or cause of such decided superiority! Situated between the sea and a bleak mountain ridge, in a northern latitude, with a cold and sterile soil, what advantages can Manchester possess for the growth of Celery?—none, save and except a trifling additional supply of rain water from the clouds, by reason of its proximity to the ocean and mountain ridge. After a close and minute investigation, there appears no just reason to induce another opinion than that the well earned fame of Manchester Celery arises solely from superior cultivation. There have been single roots of Celery exhibited in Manchester which have weighed twenty-five pounds each, but let it be remarked, there was a deception practised on such roots *by loading them with white sand*,—a circumstance which ought to be recorded with all the odium attachable to such conduct. However, it is a certain fact, that roots, clean and free from all such scandalous trickery, have been shown, weighing eighteen pounds each. During last summer, three roots, to which was awarded the first prize at the Manchester Botanical Gardens, weighed upwards of thirty pounds, on the 18th of September; and three other roots were subsequently extracted from the same row, or trench, in regular succession, which

weighed forty-five pounds collectively. It is an humiliating reflection, that such described celery was grown by a paper-maker and not by a Gardener. Whilst the culture of Celery at Manchester has attained such an high state of perfection, is it not amazing, that throughout a great part of the kingdom, roots weighing from two to three pounds, and otherwise defective, should obtain first prizes at the numerous Horticultural Exhibitions? Do not such plain truths indubitably prove a general inertness, or inaptitude for improvement in Horticulture, as contrasted with other sciences? From whence these interrogatories are extracted, others succeed, which might by possibility lead to discussion irrelevant to this subject, and are consequently withheld.

"In growing Celery, many gardeners, with a laudable but misplaced zeal of surpassing their contemporaries, use a profusion of dung, almost without any admixture of soil, in their seed Boxes, in their plant borders, and in their Trenches, to which they add liquid manure at repeated intervals; and in such cases commonly find their produce of *stunted growth*, of an *acrid* taste, and ligamentous tenacity. These observations are not made as wholly condemnatory of the use of dung in growing Celery, but to expose the fallacy of such unlimited profusion; for well sized and superior flavoured Celery may certainly be obtained without the aid of dung or other tillage, in situations where good bog-soil can be procured,—for instance, say, the top spit of a good pasture."

The seedlings are raised in the usual manner and transplanted into seed beds; the following are the writer's concluding remarks; they are so valuable, we extract them entire without further comment:—

"To produce Celery of good quality, very large, fine and clean grown, there are several particular essentials, different in some respects to any which have hitherto been promulgated, necessary to be attended to and adopted by those Gardeners who are anxious to rival, or excel the justly famed Lancashire growers.

"First, let a compost be prepared in the beginning of winter, and where practicable, let it consist of two-thirds good bog-soil, and one third well decomposed dung from an old hot bed; or in case the bog-soil be poor, let the quantities be equal: let them be thrown up together, twice turned over and thoroughly incorporated, and at the last turning over, shortly before filling the trenches therewith, in neighborhoods where good fertilizing magnesian lime can be procured, add from one to two bushels thereof to a cart load of compost; this will cause an ammonia to be given forth highly conducive to the rapid growth of the plants. Bog-soil is recommended in preference to every other, on account of its peculiar retention of moisture, as well as the facile nature of its composition, being adapted to receive and nourish the delicate and multitudinous fibres. In situations where bog-soil, or peat cannot be readily procured, let the sods of a grass sward, together with a portion of leaf mould, supply its place, to which add one-third part of dung.

"Secondly, in order to grow Celery *very large*, it is indispensably necessary to abstain from and avoid those constant soilings or earthings up, which have been frequently recommended in the *Register*, and reiterated from various parts of the kingdom, and which are also in almost universal practice. This bold innovation on general management, I am aware, is calculated to excite the ire of many experienced gardeners, and to array against me a host of captious correspondents; yet no gauntlet is thrown, neither will there be any shrinking from temperate discussion. It will be asked, are we to cease blanching? Are we to grow Celery as stray and wild as a solitary Fern on inaccessible rocks? To such, and all synonymous questions, the most decided negative is given. The process of blanching, whilst the plants are in a vigorous state of growth, may be accomplished in three weeks, but when it has nearly ceased to grow, it will require a longer time for blanching; and, therefore, when time or circumstances require, let it be earthed up from twenty-eight to thirty-eight inches high at one time, taking care the plants are free from moisture, and the soil moderately dry. With respect to its growing stray and wild, it is admitted it would do so, were no precautionary measures taken, but in three or four weeks after planting on the trenches, it will be necessary to hoe and hand-weed it; on which occasion dress off every stray leaf and stem, gather the remainder in the hand, and pass a shred of matting, or of untwisted hemp round each root, precisely at the junction of the leaves and leaf stalks, *not too tight*,—but sufficiently so to keep them in a proper upright position, and also capable of admitting the successive shoots from the centre; which will strike rapidly, and in a few weeks render it necessary to cut away the original shred, and replace it by one of larger circumference; and the second shred will subsequently require slackening, or renewing, to give room for the increasing dimensions of the plants.

"Thirdly—after having set out the rows, five feet asunder, for a final planting or crop, throw out a trench eighteen inches wide and twelve deep, laying the soil high in the centre, and sloping towards the trench, as a conductor of rain water to the roots of the plants. Fill the trench thoroughly to the top—that is—twelve to thirteen inches deep with the afore-mentioned compost, taking care to leave it moderately light;—and never tread it down with a heavy foot, if avoidable:—Just within, and on the centre range of the compost, insert the roots of the plants, with a ball of soil adhering to each, carefully arranging the numerous fibrous roots, and fixing erect with a light pressure at fifteen inches apart in the rows:—this done, give a moderate watering with soft water;—and if a leaf flags, or a perceptible check in growth takes place,—say truly the work is bunglingly performed. In a short time the fibres will pour themselves like a flood into, through, and over the whole mass of compost, extracting the needful aliment for the plants, which being thus copiously supplied, shoot forth in proud luxuriance.

"On close observation, in three or four weeks after the final planting on the trenches, it will be perceived, that many minute fibres have emerged out from each root, and are skimming on the surface of the compost in quest of additional food; therefore suffer not the hoe to approach nearer than a foot to each plant, but weed with the hand if needful: and this being performed, *cover those young and tender fibres* close up to the stem of the plant with about two inches deep of the compost or other light earth, to nourish them and protect them from the too powerful avidity of the Sun's rays; recollecting this is the only earthing, or soiling up that is to be applied until the final one for blanching.

"The four preceding paragraphs contain the principal rules necessary to be adopted for the production of large Celery, and all directions that have been, or may hereafter be given to produce large and fine Celery weighing twelve pounds and upwards each root, merely by the force of tillage in repeated doses, with the pretended advantage of strong soil, and coupled with regular earthings up every week or oftener, are purely fallacious.

"Slugs, Grubs and Worms are very apt to attack and spoil the appearance of Celery, which ought always to be sent to table clean and spotless as a Lily. To prevent their approach, give a slight sprinkling of wood ashes, or of powdered charcoal from the pits, on each side of the rows or trenches: and by using proper care, it may be produced as clean and peerless as the finest fruit.

"As regards the most suitable soil, the decidedly best Celery we ever saw taken up, weighed upwards of sixteen pounds, was as clean, well blanched, and spotless as the most fastidious epicure could desire,—not even a discolored, or perforated leaf observable in the middle of October; and was produced on a sand soil with a sub-soil of very open, coarse sand.

"The management of early and successional crops—the mode and time of watering—and many other minor and occasional attentions, which particular situations, seasons, and circumstances may and will require to be varied, will readily suggest themselves to practical and attentive men."

MISCELLANEOUS INTELLIGENCE.

Art. I. *Quincy Market.*

Roots, Tubers, &c.	From $ cts.	To $ cts.
Potatoes:		
Common, per barrel,......	1 25	1 50
Common, per bushel,......	50	62½
Chenangoes, per barrel,......	1 50	1 75
Chenangoes, per bushel,......	62½	75
Eastport, per barrel,......	2 00	2 25
Eastport, per bushel,......	1 00	
Nova Scotia, per barrel,......	1 37	1 62
Nova Scotia, per bushel,......	50	62½
Turnips:		
Common, per barrel,..........	1 00	1 25
Common, per bushel (washed)	50	62½
French, per bushel,...........	50	75
Onions, per barrel,............	4 00	4 25
Onions, per bushel, ...	2 00	2 25
Onions, per bunch,............	6	8
Beets, per bushel,...............	75	1 00
Parsnips, per bushel,............	75	1 00
Carrots, per bushel,.............	40	50
Asparagus, per bunch,..........	6	
Radishes, per bunch,............	4	6
Horseradish, per pound,.........	10	12
Garlic, per pound,..............	15	20
Cabbages, Salads, &c.		
Cabbages, per dozen heads:		
Red,..........................	75	1 00
Savoy,........................	50	75
Drumhead,....................	75	1 00
Rubarb, per pound,...............	8	10
Cabbage sprouts, per peck,......	17	20
Dandelions, per peck,...........	17	20
Lettuce, per head,..............	6	12
Spinach, per peck,..............	17	20
Peas, per bushel,.............	6 00	
Peas, per peck,...............	1 50	

Squashes and Pumpkins.	From $ cts.	To $ cts.
Canada, per cwt..............	none.	
Common crook-neck,...	6 00	
Lima,.........................	3 00	4 00
West-India,...................	4 00	
Pot and Sweet Herbs.		
Parsley, per half peck...........	50	
Sage, per lb....................	20	30
Marjoram,.......................	50	
Savory,.........................	25	37
Spearmint,......................	80	
Fruits.		
Apples:		
Baldwins, per barrel,.......	6 00	6 50
Baldwins, per bushel,......	2 75	3 00
Pearmains, per barrel,.......	none.	
Pearmains, per bushel,......		
Russetts, per barrel,.......	4 00	4 50
Russetts, per bushel,......	2 00	2 25
N. Y. Pippins, per barrel,....	3 50	3 75
Pears:		
Iron white, for baking,		
per barrel,.................	5 00	
per bushel,.................	2 00	2 25
Sweet baking, per bushel,.....	none.	
Old St. Germain, per dozen,..	none.	
Quinces, per bushel,...........	"	
Cranberries, per barrel,......	10 50	
Cranberries, per bushel,......	4 00	
Cucumbers, each,..............	20	25
Pine Apples, each,.............	20	25
Oranges, per hundred,.........	1 00	1 50
Lemons, per hundred,..........	75	1 00
Chestnuts, per bushel,.........	5 00	4 00
Walnuts, per barrel,.........	5 00	
Walnuts, per bushel,.........	2 00	2 25
Almonds, per pound,...........	12	14
Filberts, per pound,............	4	6
Castana, per pound,............	4	6

Remarks. The spring stock of last year's vegetables, &c., have now become nearly, we may say almost wholly exhausted; with the exception of Potatoes, which are yet plentiful, other articles that remain, command very high prices. Had not uncommonly large supplies of Potatoes been received from Nova Scotia, they would have, also, at this time, averaged double the present price. Onions are extremely scarce, and bring a high price; indeed, very few are to be had. Beets and Parsnips have advanced a shade; there are very few in the market. Asparagus comes to hand of excellent growth. Radishes are now very plentiful, and of good quality. Horseradish, as the season advances, will become quite scarce; and rather inferior in goodness.

Peas from New York were received this week, and sold at our quotations; they were not very well filled. If the weather continues warm, they will soon be brought in from our vicinity. Rhubarb is plentiful. Cabbage sprouts, Dandelions, &c., are now cheap, and of good growth. Squashes are all gone, except the West India kinds; the prices of these have advanced considerably.

Of Apples the stock is now very small; Baldwins and Russetts are selling quick at our quotations; those of the former on hand are extremely fine. Pears are yet to be had, and prices continue the same. A few Cranberries are yet to be found; but Rhubarb supplies their place. Cucumbers come in, but are not abundant; nor of a very excellent quality. Pine apples are now plenty, but rather small. Fine Walnuts have advanced in price.

Boston, May 24th, 1835. M. T.

Art. II. *Massachusetts Horticultural Society.*

Saturday, April 25.—*Presented.*—Chinese *naked* oats, and Spanish Long Mountain wheat, from C. R. Prescott, Esq., Cornwallis, Nova Scotia. These seeds were accompanied with a letter from Mr. Prescott, in which he states as follows:—

"A friend sent me a sample of each of those [the oats and wheat] which were sown last spring, rather late in May, and the season being cold, the wheat was rather shrunk in the kernel, but I am inclined to think it would do very well in your warm climate."

Seeds were also presented from Mr. John Redman.

May 2d.—*Exhibited.*—Epigæa rèpens, from E. Westor, Jr., Esq., gathered from one of its native habitats in Duxbury.

From Thomas Mason, Charlestown—Calceolària rugòsa, Pittósporum tobìra, Geraniums, and white, yellow, and blush Tea Roses; Beauty of England Rose, &c.

From S. Sweetser, Cambridgeport, Gazània pavònia, Gladìolus bizantìnus, Meliánthus màjor, Roses, Geraniums, &c.

May 9th.—*Exhibited.*—A new Seedling Auricula, from William Carter, of the Botanic Garden; green edged and very fine; also, seedling varieties of the Viòla.

May 16th.—*Exhibited.*—Wilmot's Early Scarlet Rhubarb, from Messrs. Hovey; this is a fine, new and very early variety; seedling Viòlas from S. Walker and Messrs. Hovey.

Art. III. *Meteorological Notices.*

FOR APRIL.

The weather through the month of April was variable, and colder than in seasons in general.

Thermometer.—Mean temperature 41° 42. Highest 70°—Lowest 18° above Zero.

Winds.—N. two days—N. E. three—E. six—S. E. two—S. three—S. W. one—W. nine—N. W. four days.

Character of the Weather. Fine nine days—Fair eight days—Cloudy thirteen days.

Art. IV. *Obituary.*

Death of Mr. Douglass, the Botanist. By the brig Caribean, Capt Rice, which arrived at this port in January, information was brought that a Mr. Douglass, a scientific Englishmen, had been killed near Omoa; it was feared at the time, that it could be no other person than Mr. Douglass, the Botanist.

The April number of Loudon's Magazine confirms this melancholy intelligence; we copy the following:—

"At a meeting of the Geographical Society, held on the 9th of March, Captain M'Komochie announced the painful intelligence that Mr. Douglass had fallen into one of the pits dug by the Sandwich Islanders, for the purpose of catching wild bulls. One of these bulls was in the pit at the time, and gored Mr. Douglass so dreadfully as to cause his death. So horrible a death, we believe, was never before encountered in the cause of natural history. No man ever introduced so many beautiful, hardy plants into Britain as Mr. Douglass, and the botanical and gardening world has sustained the greatest loss by his death. We trust Mr. Sabine, his early patron and friend, will publish some account of his career, from his first coming into the service of the Horticultural Society."

We shall endeavor, in a future number, to give some account of the numerous and truly valuable and splendid plants, which have been introduced by him.

MONTHLY CALENDAR

OF

HORTICULTURE AND FLORICULTURE,

FOR JUNE.

FRUIT DEPARTMENT.

Grape vines, in the green-house or grapery, will flower this month; keep up the temperature till the berries are set. The vines should then be syringed two or three times every week. Grape cuttings, in pots, should be kept well watered, occasionally using liquid manure. They should be trained to a stick, to prevent their being broken by the wind.

Gooseberry bushes. Thin out the fruit when about the size of peas. If the leaves show signs of mildew, syringe them with pure water.

FLOWER DEPARTMENT.

Dahlias, that are intened to flower this year, should be set out previous to the 20th; p. 130 and 172.

Green-house plants should now be placed in the open air, in a rather shady situation.

Tigridias, Amaryllises, and Tuberoses, may now be planted in the flower border, and will bloom freely.

Hyacinth and other bulbs should be taken up this month.

Perennial flower seeds should be planted during this month.

Annuals may still be sown, and will bloom profusely.

THE

AMERICAN

GARDENER'S MAGAZINE.

JULY, 1835.

ORIGINAL COMMUNICATIONS.

Art. I. *Notices of some of the Gardens and Nurseries in the neighborhood of New York and Philadelphia; taken from Memoranda made in the Month of March last.* By C. M. H.

There is another class of gardens in Philadelphia, called public gardens, which combine in addition to a flower garden, green-houses, hot-houses, &c., a bar-room or tavern; this latter addition we are far from believing useful or needful. Gardens for public amusement and recreation are very desirable in large cities, and we should be happy if our own contained one, layed out with taste, and with some knowledge of Landscape scenery, and properly and judiciously conducted. There is something of the kind much needed; and now that even the few fine private gardens which have heretofore attracted the admiration of the stranger as well as the citizen, and which have beautified the appearance of the city, seeming like rich and fertile fields, in the midst of barren wastes—now, that these (one of which, we had hoped, would have ever remained, if not in private hands, as a public garden, and as a breathing place to a thickly inhabited city) are cut up and destroyed in the tide of *public* improvements—to make room for piles of brick and stone—the want of them will be more quickly perceived. There is scarcely a city in England, or upon the continent, but has its public gardens, "Tea gardens," or something of the kind.

But to return—in Philadelphia there are two, one of which we visited, and which is well known as *McArran's Botanic Garden and Nursery;* Mr. McArran is, we have understood, a man of science and good taste, and that to him Mr. Pratt's place at Lemon Hill is chiefly indebted for its picturesque beauty, and the disposition of the grounds, garden, &c. Mr. McArran's green-house, which adjoins the house, is filled with various plants. We here saw fine large plants of the double white Caméllia, which we believe were purchased by him at the sale of Mr. Hibbert's plants; they were full of blossoms. Here was also a very good collection of Orange and Lemon trees, which are arranged around the garden, along the margins of the walks, during summer. Mr. McArran has flowered the night-blooming Cereus every season; he has also succeeded in keeping the flowers in an excellent state of preservation. Attached to the garden is a museum, aviary, &c.

New York, March.—The gardens in and around New York, embrace several fine collections of plants. Being a central situation for the exportation of plants to the northern and western parts of the country, they are, as might be expected, well stocked with such species and varieties, as are more immediately in demand. In some departments perhaps they excel, in others they are surpassed. There are not probably near so many fine private gardens, compared with Boston or Philadelphia, as at either of these places; the taste for Horticulture is not so great, nor the desire to possess rare plants so common as in our own vicinity; the taste is, however, upon the increase, and the vicinity of New York will, before long, present many fine residences. Our memoranda are made without any regard to the order we visited them:—

Nursery of M. Floy and Sons, Broadway.—This place is well known for its fine collection of seedling Camėllias. Mr. Floy has also a nursery at Haerlem, which, we believe, is well stocked with a great variety of trees, shrubs, herbaceous plants, &c., and which he cultivates very successfully. In the green-house department he does not however excel, except in his fine collection of American seedling Camėllias; his stock of foreign varieties is not so good as many other collections in his neighborhood. In the Camėllia, Mr. Floy has probably done as much towards improving the varieties of this splendid family, as any nurserymen, not even excepting Messrs. Chandler & Booth, of the Vauxhall Nursery near London, who, Mr. Loudon somewhere observes, have done more in a few years, in originating new varieties, than the Chinese during their whole lives. We were ourselves, when four or five years since we first saw his plants, astonished at the beauty and elegance of several varieties; but he has since had come into flower, several new and still more gorgeous kinds. We do not at this time recollect the names of all he has raised, and not having his catalogue before us, we enumerate the following: Camėllia japónica var. Hosáckii, Wárdii, Lorrillárdii, (now leucántha) Noveboracénsis, Stevènii, Clintònia, Hoffmánii, Franklínii, Virgínica, Bostónia, Flòyii, crassiflòra corúscans, margarètha; the two latter flowered for the first time from the seed the past winter; we had the pleasure of seeing the corúscans when in its prime, and we think it one of the most rich and truly splendid, he has ever raised. Margarètha we also saw, but the beauty of the flower was past, and we could not form a correct opinion of its character; we should suppose, however, it might be similar to Goussònia; corúscans, as its name indicates, comes nearer to a scarlet,—a color heretofore unknown in the Camellia,—than any we have ever seen. Camellia Flòyii, which we have before mentioned (p. 17), will long perpetuate Mr. Floy's name, as one of the most successful originators of seedlings, that have ever yet made the attempt.

Mr. Floy is very successful in propagating his Camellias; this he does by grafting, rather than inarching; the operation is performed very near the surface of the soil in the pots, and the plants have the appearance of seedlings, or those raised from cuttings, the place of the unison of the scion with the stock being completely grown over in one year, so as to deceive any but those who are acquainted with the method. The operation is, we believe, performed in a method little varying from that described in our last (p. 213, fig. 10); but instead of using a portion of the terminal shoot, the whole is taken. When the operation is finished, the plants are subjected to a gentle bottom heat, which causes them to push rapidly, and make a large and vigorous shoot the first season. Mr. Floy does not, however, we think, manage his Camellias with that care we have observed them at other places; they did not have that strong and healthy appearance which always make them beautiful and valuable, whether in or out of flower; his forte, seems to be to get new varieties, the looks and growth of the plants being altogether a secondary object. Mr. Floy is much assisted by his son, who is quite an amateur in the Camellia. There are numerous seedling plants which Mr. Floy has not thought worth naming, but which are fully equal in beauty to kinds already valued, and yet priced high in catalogues. We, however, give him much credit, and we are sure all our readers, and every person who is a lover of the Camellia, will join with us, in thus keeping out of collections varieties, which have nothing to recommend them but high sounding and pompous names. This is an evil which florists practice too much, and it is gratifying to find that there are some who will not sanction it; no Camellia should be added to the already existing kinds, unless it possesses some properties which will make it *equal,* if not superior to any of them. This countless number of names among several groups only leads to confusion, and the amateur or gardener may purchase a hundred plants, and not get twenty truly worth keeping. The other species of plants, which are generally found in green-houses, Mr. Floy has very few of; we observed a fine specimen of Acàcia verticillàta. Mr. Floy's plants are contained in two houses, one of which is built against his seed store; the other is divided by a partition into two compartments. In the first named house he has planted in a border, several Camellias which have attained to the height of five or six feet, and flower profusely; during the past severe winter, on one or two cold nights, they got slightly touched with the cold, which turned part of their foliage of a rusty color; we have heard it stated that when planted in the border in the green-house, they make such vigorous shoots, that they do not form flower buds; this was not the case with Mr. Floy's, which have been planted out three or four years; we have had the opportunity of seeing them the last two seasons when they were, each time, covered with blossoms. We hope to pay Mr. Floy's nursery at Haerlem a visit during the coming autumn.

Hogg's Nursery on the Bloomingdale Road.—Mr. Hogg's establishment is not so well known in our vicinity, as it should be; he was, before he left England, we have heard, a most excellent gardener, and to judge from the looks of his place, he has lost none of his knowledge, or ceased to exert himself in the cultivation of plants, since he has settled in our country. We found him a modest and intelligent man, and free from many of the prejudices which English gardeners often have in favor of their native clime. Among all the gardeners with which we became acquainted, we found Mr. Hogg to be highly esteemed for his industry, and his skill in Floriculture.

Our time at Mr. Hogg's was rather limited, and if we do not do justice to his place, it will not be intentional. He has a large number of plants, and had we passed as many hours as we did minutes with him, we might particularize a great number. As it is, we confine ourselves to those most conspicuous. There are several detached green-houses, to which different species of plants are appropriated. The largest or principal one, which we should suppose upwards of sixty feet long, is filled with a miscellaneous collection. Among the Caméllias we observed C. japónica var. exímia, and eclípse in flower; exímia is a splendid variety, as is also eclípse; the former is very rare in most collections. Mr. Hogg cuts a large number of bouquets of flowers, for balls and parties, and at the time we visited him, they had been rather closely clipped; he possesses a fine plant of Lady Hume's Double blush, the flowers of which are of a much deeper tint than any we have ever seen. One of the houses is devoted wholly to geraniums, of which Mr. Hogg probably possesses the finest collection in the country; they were most beautifully grown. He certainly will rank as one of the most successful cultivators of the geraniàceæ. He annually receives from his correspondents in London many of the new varieties; we forgot in our haste, to ask him the exact number of kinds he had in his collection; those which are considered new and beautiful this season are Yeatmaniànum, gloriànum, albinàthum, Napoleon, Mary Queen of Scots, and some others, the names of which do not occur to us; Mr. Hogg also has a very fine collection of Caméllias. We were highly pleased with the neatness and arrangement throughout every part of his establishment.

Country Seat of Wm. G. Buckner, Esq. Bloomingdale.—From Mr. Hogg we visited this fine place; it is situated, we believe, about six miles from the centre of the city. The garden and grounds are under the management of Mr. Thomas Dunlap, a very intelligent young man and a great lover of plants; we are indebted to him for an acquaintance with several amateurs and gardeners around New York.

The green-house is not very extensive, but it contains, however, many fine plants. Mr. Dunlap has much under his care, and finds but little time to devote to the green-house; notwithstanding this, the plants look well, particularly his Camèllias; he has raised several seedlings, and judging from the foliage, (which, however, is rather an uncertain indication of a fine kind,) we should think some of them might prove very beautiful. Mr. Dunlap has raised a seedling plant of the Thèa víridis, impregnated with the pollen of the Camèllia japónica; it nearly resembles the Tea in foliage, but the flowers may be different. He has also raised a fine seedling variety of the Prímula prænitens, with a delicate fringed edge; it is much more desirable than its parent. We here observed the finest specimens of Acácia dealbàta and decúrrens we have ever seen; they were covered with their showy, exquisite blossoms; verticillàta was also in full flower. Mr. Dunlap had plants of Cáctus Jenkensònii, with large pods of seed nearly ripe; he has a good collection of geraniums. Most of the Camèllias had shown blossom; C. japónica var. Colvíllii, a rare kind, had just shed the petals of its last flowers. Mr. Dunlap has a fine stock of Dahlias, which he had then in a frame, and they were just pushing their shoots; he has raised several fine seedlings, for which, at the Dahlia exhibition of the N. Y. Horticultural Society, last fall, he received the first premium; the names are given at page 157. He has also been very successful in flowering several of the finest varieties. The soil of Mr. Buckner's garden, is strong, rich, and moist, and well suited to their growth.

Scat of Nathaniel Prime, Esq., Hell-Gate, March.—This place is well known, as containing one of the finest ranges of forcing houses in the vicinity of New York. These have been built within a few years, and the vines, peaches, &c. planted in them, have just come into bearing. The whole is under the management of Mr. Hyslop, who appears well acquainted with his profession. There is also here, a green-house, and a small forcing house, which have been built several years; the former was filled with a variety of plants, which looked extremely well. In the small forcing house Mr. Hyslop had begun to force several weeks before we visited him, and at the time had grapes and peaches nearly half grown. We never observed grapes which set finer, at this early season of the year; the peach trees were also covered with fruit; so much so that they would need thinning out. The practice of thinning fruit, is too little attended to, by most gardeners; and trees are often nearly ruined, by the great crops which they are very frequently permitted to bear; not only in forcing houses, but in the open garden, and with every kind of fruit, should this practice be carried; we should not then so frequently hear of trees producing fruit only every other year. The vines in the new range are, many of them, raised from cuttings procured from the garden of T. H. Perkins, Esq. at Brookline—among which are some of the kinds, for which his collection is considered superior. The vines are to be trained up under the surface of the glass, and the peaches, plums, &c. over arched trellises, in the centre of the houses; the wood of the vines was exceedingly strong, and will produce a few fine clusters of grapes this season; the system of training which Mr. Hyslop intends to pursue, is, we suppose, that of procuring new strong shoots every season, by cutting in every other vine, or every other shoot of each vine, every year. Mr. Prime has a large cistern in front of his range, from which water is supplied to the green-house, forcing houses, and to all parts of the garden. We are happy to see the taste for such luxuries as forced fruits extending, and we hope that other houses, as extensive as Mr. Prime's, will be found in many of the fine gardens of gentlemen, independently able to erect them. The views of the surrounding scenery, from Mr. Prime's pleasure ground, in the summer, is said to be delightful.

(*To be continued.*)

Art. II. *Some account of Duane's purple French, Royal de Tours, and the Semiana Plums.* By Mr. S. Pond.

The excellence of the two first named varieties of Plums, both as respects their superior qualities, and their great productiveness, has induced me to offer a few observations, in relation to their growth.

In the fall of 1833, I budded a large number of stocks, with several kinds of plums, among which were the Duane's purple French, and the Royal de Tours. Both are growing at several places in this vicinity, and the fruit has been exhibited at the Massachusetts Horticultural Society. Last season the plants made fine shoots, growing to the length of five or six feet each, with lateral branches; they were full of flower buds this spring. This shows that they are very valuable as early bearers, from the time of budding; some strong growing kinds, like Smith's Orleans and Bolmer's Washington, often do not produce fruit from the bud, under four or five years. Duane's purple is stated in Prince's Pomological Manual, as being imported from France by James Duane, Esq. of Duanesburg; described as follows:—"color a pale purple or violet; its flesh juicy and fine flavored, and it is of monstrous size." It ripens in August, and deserves to be cultivated in every garden. Probably it is some esteemed French plum, the original name lost.

The Royal de Tours (*Ken. Am. Orch.* p. 266) is also a desirable plum, and no good fruit garden can hardly be without it; its early ripening renders it extremely valuable; the tree is of free growth, and early bearing from the bud or graft; the fruit good size and very rich in flavor. It is stated in the London Horticultural Society's catalogue to be "equal to an Orleans if not better."

The Semiana Plum is a variety which deserves particular mention, for the extreme lateness of its fruit arriving at maturity, and combining the excellent qualities of delicious and abundant juice. It is a most productive kind, not a season since it has come into bearing in my garden having passed, without its producing a fine crop. The fruit may be permitted to hang on the tree until October, and if any thing, it improves in flavor by allowing it to remain. This kind is grown about Boston considerably, but not so much as it should be. Probably the latest plum, which is to be found in our gardens, and therefore highly valuable, as fine fruit for the table in October, when nearly every other variety is gone, is much desired. Two or three other varieties, which are not so well known as they should be, at another opportunity I hope to give you a few remarks in relation to.

Yours,

S. Pond.

Cambridgeport, June 13, 1835.

Art. III. *On the Cultivation of Rhubarb (Rheum rhaponticum).* By the Conductors.

The cultivation of Rhubarb for culinary purposes has been common for several years. At what time it was first introduced into this country, we have not at present the means of ascertaining. We believe, however, that it was first cultivated to any extent in this vicinity, by John Prince, Esq. of Roxbury; a gentleman, to whom the Horticulturists, as well as the Agriculturists, are deeply indebted for the introduction of many choice plants and fruits. Its value is so great, that scarcely a garden can now be found in which the plant is not cultivated. The generic name Rhèum, according to *Loudon's Ency. of Plants*, is "supposed by Linnæus to be derived from a Greek word; it nevertheless was formed from *Rha*, the ancient name of the Volga." It was not probably known in England, as a culinary plant, at the time of Nicol or Abercrombie, as it is not mentioned in either of their works; Gerard in his Herbal, (1597) states that he, with others, cultivated it for its medicine. Of later years it has been grown extensively for the London market, and some of the establishments near the city send loads of the stalks to Covent Garden every season. By early forcing it is produced throughout nearly the whole season.

Varieties.—There are several varieties in cultivation in the English gardens, but only two or three have ever, we believe, found their way into our country. The R. rhapónticum, we presume, is the kind generally known; but two years since we received the seeds of a variety called *Wilmot's early scarlet;* this is so much superior to the old kind, both as respects its earliness and excellent qualities, that we predict it will take, in a short time, its place in most gardens.

Propagation.—All the sorts are propagated by dividing the roots or by seeds—the latter is the best method, making stronger and finer plants; when, however, the seeds are not to be procured, or the kind rare, the roots answer very well. They should be taken from the old one with as large a piece of root as possible, and the crown or bud uninjured. They may then be planted in the same manner as recommended for seedling plants.

The method we have practiced may not be new, or superior to any other; but as it has been attended with complete success, we offer it to our readers.

About the first of April, we received a few seeds of Wilmot's early scarlet Rhubarb; we immediately had a piece of ground prepared for its reception. A spot was selected which was light and rich, and exposed to the sun; it was manured and dug fine, and the seeds planted in drills; the young plants appeared in a few days, and grew very rapidly. As the plants came up quite thick, we had them thinned out, and let them remain in the seed bed until the final planting out; we are not confident but the size of the roots would have been greater, and have grown stronger, if they had been transplanted from the seed bed to another bed, before placing them where they were to remain to produce their stalks; but as we did not pursue this course, we cannot state the actual benefits which would have resulted from the practice.

The first of August a piece of ground was marked out, in which to place the plants for permanent use. The soil was two and a half feet deep, and light and rich; it was covered with decomposed hotbed manure, of the previous spring, and dug in. The bed was then trenched to the whole depth (two and a half feet), the soil that was at the bottom now being at the top; this was again covered with the same kind of manure just mentioned, and the bed again dug over; after allowing it to settle for a few days, it was ready for planting. The distance at which the plants were to be placed was then marked out; this is laid down by various writers, at various distances; some say four feet apart each way, some five, and others at greater distances. We are confident that the roots, to produce well, require considerable room to extend, more than is given in many instances; our roots were set out in rows four feet apart, and three feet distant in the rows; but this will not give them room enough by another season, and we would recommend four feet apart in rows, and if the ground can be easily spared, four feet from row to row. Remove the plants carefully from the seed bed, and set them out, treading the soil gently about the roots, and finish with a good watering; if this is done carefully, the plants will not wilt but very little, and will resume their growth, and by the first of October make large plants, strong enough to stand the winter without any protection. Upon the approach of cold weather, however, we prefer throwing over the bed some coarse strawy manure or leaves, as the frost will not penetrate so deep, and thus the plants start earlier in the spring. The following summer a large number of stalks were cut without in the least weakening the plants. All that is required in after culture is, to keep the ground free from weeds, and to give a good dressing of manure every fall, or spring.

Forcing.—The Rhubarb is easily forced, and by various methods. If the roots are taken up in large pots and placed in a hot-bed, they produce very well; or, they may be planted in beds by themselves, and forced in the same manner as asparagus. One excellent way is, where there is not the advantage of a hot-bed, to place a frame on the bed where the roots stand, and to line it with manure all round, covering with sashes, at the same time to prevent the escape of the heat; they may be also forwarded by placing hand lights, boxes, or large pots over individual roots, and surrounding them with fresh manure. After the roots have been forced in pots, they may be turned out in the garden to acquire their strength.

We would highly recommend Wilmot's early scarlet; we have cut this spring the stalks, at the least, two weeks earlier than the old variety. There is a variety called the gigantic, not yet introduced, which grows very rank, but not so early as the Wilmot's. At some future time, we shall state some further facts in relation to the cultivation of Rhubarb. The seed, if sown at this time, will make good plants by fall, and be fit to transplant into beds in the spring.

ART. IV. *On the Cultivation of Geraniums and Canary Asters (Cineraria cruenta).* By MR. S. SWEETSER.

DEAR SIRS,

THE following remarks on the cultivation of Geraniums and Canary Asters, are the result of my method of treating these plants, and as they may be interesting to many of your readers, particularly those who have not had much practice in their cultivation, I take pleasure in communicating them through the pages of your Magazine.

Geraniums are a well known beautiful tribe of plants, which will always be admired, either for the agreeable fragrance of their foliage, or the splendor of their flowers; adding to this the continual number of new varieties which are every season originated, which make them always new, they may be considered as one of the most desirable plants for the parlor or the green-house. When the taste for this group shall become general, new varieties will undoubtedly be raised in our own gardens; and we shall no longer be dependent upon importations, which, however so carefully transported, are always attended with great risk. A prejudice exists among many amateurs, that because geraniums are common, they do not deserve that attention which is bestowed on many other plants: this, I apprehend, must arise from the cause of the finest varieties having never been seen; for certainly, when the great delicacy of their flowers, the brilliancy and endless variety of their colors, the finely pencilled lines in some, the clouded spots in others, and finally, when the great length of time which they continue to display their blossoms is taken into consideration, they cannot be surpassed but by few flowers.

The latter part of this month, the plants which have opened the greatest part of their flower buds, should be removed from the green-house to the garden; placing them in a situation where they will be exposed to the sun part of the day. This is much better, in my opinion, than placing them under the shade of trees, where the sun shines on them but an hour or so in the morning—as this tends to draw them up weak, and when the cuttings are taken from them, they are so succulent that they often damp off; when, however, the plants are placed as first recommended, the wood grows strong, short jointed, and well ripened. About the middle of July is the time I prefer to take off cuttings; some cultivators put in sooner, but, the plants generally get large and straggly before spring. The pots to receive the cuttings should be filled with a compost of leaf mould and sand, in about the proportion of one third of the latter, to two thirds of the former. Take off the cuttings with a sharp knife, close below a joint, always selecting the top shoots, discarding, however, that part near the old stems of the flowers; they should be about four inches in length; then place them in the pots (six or eight in a number three), carefully marking each kind. When all are finished, give a gentle watering, and place them in a shady part of the green-house, or frame, or in want of either of these, in the garden, against a fence or wall, facing the north. They should be carefully watered, but not kept too wet until rooted, which is generally in the course of three weeks.

In September, preparation should be made to pot off the plants.

The compost for the purpose should consist of equal parts loam and leaf mould, with the addition of very little sand, in the proportion of one sixth to the whole; they should be put in number two pots, which will be sufficiently large to flower them in. The practice of using such large pots as is commonly the case, is not needful; the plants look much prettier, and flower profusely in a smaller size; after they are all potted, place them where they will receive the sun in the morning; and gradually expose them to its full influence, in order to harden their shoots, and prevent their drawing up. Early in October, they should be put into their winter quarters; no further care is necessary, otherwise than to keep them from the frost, and give them as much air as possible. The first of April they will commence flowering, and continue till July.

The Canary aster is a pretty plant, but is not often seen in good perfection; the plants after flowering are very apt to die. I have always transplanted mine, after the flower stems are cut off, into the flower border, in rather a shady place. It seems almost impossible to keep them in pots during summer; the plants here make a good growth and spread considerably. About the first of September they are taken up, the roots divided, and placed in pots; upon the approach of frost they are taken into the green-house. Care should be paid to them, and whenever the *green fly* appears, the plants should be fumigated, or they will soon destroy their beauty.

Yours,

S. Sweetser.

Cambridgeport, June 15, 1835.

Art. V. *Some Remarks on the use of the Polyanthus (Prímula vulgàris, var. Polyanthus), as an edging to flower borders and parterres.* By an Amateur.

Dear Sirs,

I am induced to send you a few remarks on the use of the Polyanthus as an edging to flower borders, or small flower beds, where beauty and neatness is the principal object. The Polyanthus, though I believe heretofore considered a rather tender plant, is with me perfectly hardy; and stands the winter full as well, without the least protection, as our indigenous perennials. Perhaps the choice named varieties of this plant, if they were transplanted into the border after having been grown in pots several years, and kept in a green-house or frame during winter, would not be sufficiently hardy to live through. But they can undoubtedly be acclimated.

The varieties are exceedingly numerous, although very few, and I may say scarcely twenty-five named ones, are to be found in our gardens. This is much to be regretted, as the brilliancy of their colors, eclipsed but by few plants, and their early flowering, renders them one of the most interesting as well as splendid ornaments of the flower border. The introduction of the fine kinds of the English florist's, are particularly desired, and new varieties should also be procured, if possible, by repeated experiments in sowing the seed.

Some two or three years since I sowed seeds of the Polyanthus which were procured from Holland: they were sown in the hot-bed; but this was too warm a situation for them, as they did not vegetate well; and since, I have invariably planted them in the green-house, where scarcely a seed fails to grow. When the plants had made two or three rough leaves, they were transplanted into small pots, and placed in a frame, partially shading them from the mid-day sun. They grew very fast, and as soon as the weather permitted, the plants in the pots were set out in the garden in a shady situation; care was taken that they were properly watered, as the Polyanthus is exceedingly impatient of aridity.

On the approach of winter the plants were placed in a green-house until spring; they began to flower early, and in May they were turned out of the pots into the flower border; they grew rapidly, and each plant by the first of June, had made three or four offsets; they were then separated and set around the garden. None of the varieties proved to be worthy of cultivation as a select flower; and any one who intends to raise new varieties, must expect such disappointments; they all possessed, however, considerable beauty, enough to entitle them to a place in every garden.

The last season the roots were parted and set in a row near the box edging; they are now growing vigorously, not a leaf having been injured during the past cold winter, and are throwing up large trusses of blossom buds, some of which in warm situations are in flower. Their fine appearance suggested their use as a border edging, and there is no doubt but they will answer that purpose better than any other flower. In England the Daisy with its varieties, and the Gentiàna acaúlis, are frequently made use of as edgings; but the former will not stand our hard winters, and the latter I think will not, although I have not yet tried the experiment, as it is an alpine plant. The cultivation of the Polyanthus as a florist's flower, together with the raising of new varieties from seed, will form a communication of itself at some future time. If these few hints should call attention to the Polyanthus as an edging plant, the success attending the same, from those who try the experiment, would be gladly read.

Yours,

AN AMATEUR.

Cambridge, May 16th, 1835.

Art. VI. *On Preparing Strawberry Plants for Forcing.* By J. W. Russell.

The forcing of strawberries is a practice very little adopted, I believe, in this country. In England they are brought to market from March to July; and command, at first, the enormous price of 2*s.* sterling, per ounce. They are forced as easily as any other fruit, and although they may not prove so productive, and give as good returns to the market gardener, in this country, as other forced fruit, or even vegetables, they will undoubtedly be grown in gentlemen's gardens as a luxury, for the gratification of themselves and their friends.

The method I would recommend is as follows:—In the early part of next month, after the fruit is gathered, and the plants begin to grow rapidly, go over the beds and take off all the weak and small runners. Let the soil next to the beds be dug up, and enriched with some good old rotten hot-bed manure or leaf mould; then prepare a quantity of small pegs, which can be quickly made out of old brush, in order to fasten each runner to the soil; go over all in this manner, covering them at least half an inch deep. This practice should be continued until a sufficient number are procured, or until the first of August, after which they will not answer, as the plants will not get strong before cold weather. When they have made good roots, which can easily be perceived by their strong growth, (generally in about a fortnight,) they should be taken up and potted; put three plants in a number three pot, and set them in the shade for a few days, till they have made new roots; the pots may then be plunged in the ground, in a cool and rather shady part of the garden, where they should remain until frost; plunging the pots in the ground, saves the trouble of watering, and also keeps the soil in a moist state. Nothing is more injurious to strawberry plants in pots, than to have the soil continually wet and dry; and unless plunged in the ground, our searching winds and hot sun, are sure to dry up all the moisture, although they may be watered twice a day.

The soil I prefer, and which I think the plants grow strong and bear profusely in, is composed of two parts strong loam, and one part decayed manure or leaf mould, broken up well and turned over two or three times before using. The pots should be well drained by placing a potshred over the hole in the bottom. In the fall of the year, those that are wanted for early forcing should be taken up and placed in a frame; upon the approach of severe cold, they should be covered with four or five inches of leaves, straw, or old haulm. Those left in the open ground should also be protected, so that they can be easily taken up in the months of February and March, as they are wanted for a succession; the plants may be occasionally watered with liquid manure.

Yours, J. W. Russell.

Mount Auburn, Cambridge, June 20, 1835.

ART. VII. *Method of Training the Petùnia phœnicea and Nyctaginiflòra.* By the CONDUCTORS.

THESE beautiful and truly splendid ornaments of the flower garden or green-house, the former of which we have frequently mentioned, may be trained in any manner, to suit the fancy of the cultivator; they may be either grown in pots or in the border, and nailed to walls, tied up to stakes or trellises, or allowed to trail on the ground; the pliability of their stems will allow of their being trained in almost any method. We have trained the phœnicea two or three ways, but prefer in the border, that of training it upon the ground; in this situation, the elegance of its lovely blossoms, of the richest purple tint, when expanded, and the sun shining full upon them, cannot well be imagined.

The young plants, whether raised from seeds or cuttings, if in pots, should be turned out in May or June; select a warm and dry situation; the soil should be light and rich; if not naturally so, it should have a quantity of leaf mould or *very* decayed old manure added, mixing it up well with the soil. As soon as the plants begin to extend their shoots, they should be fastened down to the ground by means of little pegs, and about half an inch of the soil placed upon them; this will cause them to take root and acquire more strength, and, also, prevent their being blown about by the wind: in this manner, they will bloom until killed by frost, two plants covering a space several feet square, before the end of the season. If planted near the nyctaginiflòra, the contrast will be exceedingly pleasing, and the fragrant flowers of the latter will make up in part for its lesser beauty. We have heard accounts of its growing seven or eight feet in height, and being covered with upwards of twelve hundred flowers; but its habit seems naturally to be prostrate, and its flowers are much finer when so grown. It seeds very sparingly, and will not probably become common, so soon as many other less beautiful plants; it can, however, be raised from cuttings, which root quick and make nearly as fine plants as those raised from seeds. Petùnia nyctaginiflòra may be treated in the same manner.

ART. VIII. *Notices of new and beautiful Plants figured in the London Floricultural and Botanical Magazines: with some Account of those which it would be desirable to introduce into our Gardens.*

Edwards's Botanical Register, or Ornamental Flower Garden and Shrubbery. Each number containing eight figures of Plants and Shrubs In monthly numbers, 4*s.* colored, 3*s.* plain. Edited by John Lindley, Ph. D., F. R. S., L. S., and G. S., Professor of Botany in the University of London.

Curtis's Botanical Magazine, or Flower Garden Displayed, containing eight plates. In monthly numbers, 3*s.* 6*d.* colored, 3*s.* plain. Edited by William Jackson Hooker, L. L. D., F. R. A. and L. S., Regius Professor of Botany in the University of Glasgow.

CLASS I.

Plants having distinct flowers and sexes.

SUB-CLASS I.

Exogenous or Dicotyledonous Plants, (with two seed leaves or cotyledons.)

DIVISION I. Plants with a polypetalous (many-lèaved) corolla.

XXII. *Berberìdeæ.*

BE'RBERIS.

dealbàta. *Lindl.* Whitened Barberry. Probably a green-house evergreen shrub, in our climate; flowers yellow; increased by layers; a native of Mexico. Bot. Reg. t. 1750.

A beautiful species of the evergreen berberies, which, together with several others, we wish to see introduced to our gardens. Dr. Lindley calls it a "remarkable species." The plate represents a terminal branch, from the axil of the leaves of which, issue dense clusters of bright yellow flowers. Obtained from Mexico by the London Horticultural Society.

Bèrberis Aquifòlium *Pursh.*, Mahònia Aquifòlium *Mich.*, a magnificent species, should be in every garden. It was sold a few years since at the enormous price of twenty-five dollars a plant. Mr. Wm. R. Prince informed us not long since that he sent to France and England a large number, at the price of from two to five guineas a plant. Messrs. Prince have now a fine stock, which are sold the present season, at two dollars and a half. We believe they are also to be found in the nurseries in our vicinity. It is perfectly hardy. Mr. Loudon states, in noticing this species, that "it is a plant worth its weight in gold." Messrs. Low & Co. of the Clapton Nursery, near London, have introduced one or two species (B. rèpens and B. nervòsa) which have been figured in Sweet's British Flower Garden.

XXXII. *Ternströmeàceæ.*

Camèllia japònica, var. francofurténsis. This is the name of a new variety, mentioned in the May number of Loudon's Magazine, as having been raised in Frankfort on the Main (Russia) by J. Rintz, Jr., Nurseryman: it is stated to be as large as C. reticulàta, the form and colors unrivalled (are said to be white with dark spots). It flowered for the first time last season; this year it has flowered again, and more than exceeded the great expectations which were formed of its beauty. Mr. Rintz thinks it the handsomest ever raised, and that if it had bloomed in the splendid green-houses of the London nurserymen, it would have attracted great notice; the parents from which it was originated are not mentioned.

XLIV. *Escallónieæ.*

Escallonia montevidénsis is figured in Paxton's Magazine of Botany for May. It is there stated as a green-house plant, growing upwards of eight feet high; producing many panicles of flowers, which "emit a powerful fragrance;" thrives well in sandy loam and peat, in the open garden in England, and propagated by cuttings; this is the only genus of the natural order Escallónieæ; it consists of several species, all of which are handsome and desirable plants.

LXXXVIII. *Euphorbiàceæ.*

PLAGIA'NTHUS.

sidoïdes. *Hook.* Sida-like Plagianthus. A green-house shrub; two or three feet high; with small whitish flowers appearing in September; a native of Van Diemen's Land. Bot. Mag. t. 3396.

A plant of no great beauty, lately introduced from Van Diemen's Land. Dr. Hooker is not yet certain, whether it belongs to the genus Sída, or Plagiánthus. Probably not hardly worth introduction, unless in Botanical collections.—(Bot. Mag., *April.)*

CLXX. *Ericàceæ.*

ARBU'TUS.

procèra. *Doug. Herb.* Tall arbutus or Strawberry tree. A small tree; habit of growth similar to other arbutuses; flowers greenish white, appearing in May; introduced from the North-west coast of North America. Bot Reg. t. 1753.

This is a fine species, discovered by the lamented and unfortunate Mr. Douglas, and sent to the London Horticultural Society in 1825. "In the garden it forms an evergreen bush, with a fine broad glossy foliage, and a very vigorous appearance; but it requires to be carefully protected from extreme cold in winter, and succeeds best against a west wall." The plate represents a small branch, terminated with a cluster, or rather a loose panicled raceme, of flowers, which "are arranged after the manner of those of Arbùtus Andráchne, to which species it is most nearly allied." The leaves are broad oblong, and deeply serrated. Found in the mountainous and woody parts of the North-west Coast.—(Bot. Reg., *April.)*

Rhododéndron reticulàtum *D. Don.*, a new species from Japan, is mentioned in the April number of Loudon's Magazine, as being in Mr. Knight's collection; it is described in G. Don's *System of Botany and Gardening*, Vol. III. p. 846.

Mr. Don, in the above named most valuable and comprehensive work, has adopted a new division of the genus Erìca, by his brother, Mr. D. Don. As this new division will be adopted in Loudon's *next supplement* to the Hortus *Britannicus*, and as many of our readers will not probably see the work, at least for some time, we here present an abstract of it. The genus Erìca, before this division, consisted of several hundred species, a great part of which were botanically distinct, in character and habit:—

"The names of the proposed groups, the etymology of their names, and the species typical of the groups, are the following:—

Erìca *(E.* cinèrea *L.)*, Gypsocállis (etymon not given. *E.* vàgans *L.,)* Páchysa *(pachys*, thick; substance of the corolla. *E.* árdens *Andr.)*, Ceràmia *(kera-*

mion, a little pitcher. *E.* urceolàris *Soland.)*, Désmia *(desme*, a little bundle; flowers crowded. *E.* confërta *Andr.)*, Eurylepis *(eurys*, broad, *lepis*, a scale; calycine scales dilated. *E. H*alicácaba *L.)*, Eurystègia *(eurys*, broad, *stege*, a cover; calyx large. *E.* glaúca *Andr.)*, Lophándra *(lophos*, crest, *aner andros*, a man or stamen; cells of the anthers crested. *E.* pyramidàlis *Andr.)*, Lámprotis *(lamprotes*, splendour; calyx glistening. *E.* calycìna *L.)*, Callísta *(kallistos*, most beautiful. *E.* Wálkeri Andr.), Eurylòma *(eurys*, broad, *loma*, a margin; limb of the corolla dilated. *E.* Aitoni Willd.), Chòna *(chone*, a funnel; figure of the corolla. *E.* sanguínea), Syringòdea *(syrigx syriggos*, a reed or pipe; corolla longly tubular. *E.* vestìta), Dasyánthes *(dasys*, hairy, *anthos*, flower; corolla hairy. *E.* Sparrmánni L.), E′ctasis *(ektasis*, extension; stamens prominent *E.* Plukenètii L.), Eriodésmia *(erion*, wool, *desme*, a little bundle; the flowers resemble. *E.* capitàta *L.)*, Octopèra *(okto*, eight, *pera*, a sack; capsule eight-celled. *E.* Bergiana L.), Erèmia *(eremos*, solitary; seeds one in each cell. *E.* tótta *Thunb.)*, Saláxis *Salisbury* (neither etymon nor type is given), Callùna *Salisbury (E.* vulgàris *L.)*, Blæ′ria L., Andrómeda L., Cassìope *(Cassiope*, the mother of Andromeda. Andrómeda tetragòna *L.)*, Cassándra *(Cassandra*, the daughter of Priam and Hecuba. A. calyculàta *L.)*, Zenòbia *(Zenobia*, the queen of Palmyra, distinguished for her virtue and learning. A. speciòsa *Mx.)*, Lyònia Nutt. (A. paniculàta *L.)*, Leucóthöe (a poetic name. A. axillàris *Solander)*, Pìeris (one of the muses. A formòsa *Wall.)*, Phyllódoce (one of Cyrene's attendant nymphs. A. cærùlea *L.)*, Bryánthus *Gmelin* (Menzièsia bryántha *Swz.*, and empetrifórmis *Ph.)*, Dabœ′cia (Andrómeda Dabœ′cii L., Menzièsia polifòlia *J.)*. Menzièsia ferruginea and globulàris constitute, it is remarked, a genus altogether dissimilar, and to be referred to the *Rhodòreæ*."

RHODODE′NDRON.
indicum; *var.*speciòsum. Showy Indian Rosebay. A green-house shrub; growing from four to six feet high; color crimson, with dark spots; flowering in May; Sweet's Brit. Fl. Gard. t. 284.

A splendid hybrid, raised by Mr. Smith, of Coombe Wood, the seat of the late Earl of Liverpool, in 1830, "from seed of R. indicum [Azàlea indicum], that had been impregnated with the pollen of phœniceum." A very desirable variety of the Rhododéndron, which we hope will be soon introduced into our gardens.—(Brit. Fl. Gard. *April.*)

CLXXV. *Lobeliàceæ.*

LOBE′LIA.
fùlgens. var. propínqua. New fulgent Lobelia. An herbaceous perennial, requiring the protection of a green-house or frame during winter; color of the flowers bright scarlet; propagated by division of the root and by seeds. Paxton's Magazine of Botany, t. 52.

This brilliant variety, from the representation of the plate, is a "hybrid raised from seeds of the Lobèlia fùlgens impregnated with the pollen of L. spléndens. It partakes of the character of both parents; but it is much superior to either in manner of growth and general habit. The spikes measure from two and a half to three feet in height, forming elegant pyramids."

The specimen from which the drawing was taken, was growing in the Nursery of Messrs. Young, of Epsom. The management and propagation of the plant is exactly the same as its parents, mentioned at page 56.—(Paxton's Mag. Bot., *April.)*

CCXI. *Scrophularíneæ.*

RHODOCHI'TON. *Zuccarini.*

volúbile. *Zuc.* **Twining red-cloak. A climbing herbaceous plant; flowering all summer; color of the flowers deep red; propagated by seeds and cuttings; a native of Mexico. Bot. Reg. t. 1755.**

This desirable and magnificent climbing plant has been figured, within the last six months, in five periodicals that have come under our observation; first, in Sweet's British Flower Garden, then the Botanical Magazine, next, Paxton's Magazine of Botany, afterward the Floricultural Cabinet, and lastly, in the Botanical Register. This desire to give a figure at the earliest opportunity is evidence that it has great claims to beauty.

It was first introduced to England from the Berlin Garden late in 1833, by Messrs. Low & Co. of the Clapton Nursery, and has since been extensively spread through the nurseries and gardens in Britain. It was originally raised in the Botanic garden at Munich, from seeds collected in Mexico, and was the next year distributed to other gardens; an account of it was soon after published in the Transactions of the Prussian Horticultural Society, a figure given of it, and its mode of treatment mentioned. This is as follows:—

"It is a climber, and may be applied to cover the walls in conservatories, as well as in the open ground during summer. It presents a really surprising aspect, when the outer walls of a greenhouse are covered with a screen formed by its numerous branches, tinged with red, and loaded with the most beautiful purplish-black flowers, hanging down from the red calyxes. Out of every axil, to the most remote part of the twigs, a flower takes its origin, hanging down from a long stalk, which like the under side of the leaves and branches, is colored red. There can be no doubt, that it is, of all the known climbing plants with which we cover our walls during summer, the most remarkable and beautiful, and ought to be particularly recommended, as it is easily cultivated, and flowers so freely. Its propagation is by seeds and cuttings; the seeds are sown in March or April, that the young plants may become strong enough in time for planting in the open ground, where they are to remain during the whole summer, until frost sets in; if these plants are to be preserved, they should be potted off and put in a conservatory, where they prosper in a temperature from 43 deg. to 48 deg. *Fahr.* They are also easily propagated by cuttings."—(Bot. Reg., *April.*)

We have no doubt it would require the same treatment in our climate as the Lophospérmum—to which genus Mr. D. Don has referred this plant. Dr. Hooker and Professor Lindley, however, adhere to Professor Zuccarinis' first name, R. volúbile. The foliage is similar to Lophospérmum, as well as the flowers; but the Rhodochíton has a red calyx. We hope to see it introduced.

Lophospérmum erubéscens is a lovely climber, and entitled to a place in every garden. The color of the flower is a delicate blush color, and they are produced in great abundance all summer.

Calceolària *variety* Majoriàna is figured in Harrison's Floricultural Cabinet for April. It is one of several *shrubby* varieties raised from seed by H. Major, near Leeds. The color is a rich scarlet. This and other of the dark colored kinds would form a striking contrast when grown with the old C. integrifòlia.

CCXX. *Verbenedceæ.*

CLERODE'NDRON.

hastàtum. *Wall.* Halberd-leaved Clerodendron. A stove plant; growing from five to six feet in height; flowers greenish white; appearing in October; a native of Sylpet in India. Bot. Mag. t. 3398.

This is stated as "a valuable acquisition" to the stove. The flowers have somewhat the appearance of Miràbilis longiflòra; but are arranged in panicles, and, contrasted with the fine large foliage of the plant, have an elegant appearance. Dr. Hooker states that not even a quarto plate would have done justice to the subject. Discovered by Mr. Smith, and the seed sent to England by Dr. Wallich of the Botanical Garden of Calcutta.—(Bot. Mag., *April.*)

CCXXXVIII. *Amaryllideæ.*

EU'RYCLES.

Cunninghàmii. *Art.* Small flowered Eurycles, or Brisbane Lily. A greenhouse bulb; flowers white; a native of New South Wales. Bot. Mag. t. 3339.

A beautiful species of the genus Eurycles, which now consists of three species; it was discovered in New South Wales by Allan Cunningham; flowers white, in heads of from four to six flowers, on a scape about a foot in height; bulb tunicated, and about the size of a walnut.—(Bot. Mag., *April.*)

CCLXVII. *Asphodèleæ.*

DRACÆ'NA.

terminàlis. The Sandwich Island Tea-Plant. A stove plant, growing to the height of ten or twelve feet; flowers pink or white; propagated by seeds or truncheons of the stem; native of the South Sea Islands. Bot. Reg. t. 1749.

"One of the most graceful of arborescent stove plants, where there is sufficient height for it to rear its slender stem to the elevation of ten or twelve feet." It is stated in appearance to resemble a palm; and although it is not found "to be one of that princely tribe, yet there can be no doubt that it serves to connect the chain of vegetation, by bringing the asparagus in contact with the cabbage palm."

It is a valuable plant in the South Sea Islands, and is used by the natives for eating, and also for making an intoxicating liquor, which is much drank; a good beer, it is said, may be made from it; and the juice, when boiled down, makes a good substitute for sugar.

As the following may be interesting to the public and to many of our readers, we copy it from the Register, where it is also extracted from Ellis's work on the Sandwich Islands.

"We should think it an excellent antiscorbutic, and as such, useful to ships in long voyages. Captains visiting the Society Islands, frequently procure large quantities of it to make beer with during their voyage, as it will keep good six weeks or two months, after it is baked. On my return in the American ship Russell, Captain Coleman, he procured a quantity that had been baked at Rurutu, near the Society Islands, and brought it round Cape Horn. It lasted five or six weeks, and would probably have kept longer, as the only change we perceived during that time was a slight degree of acidity in the taste. Cattle, sheep and goats are fond of the leaves; and as they contain more nutriment than any other indigenous vegetable, and may be kept on board ships several weeks, they are certainly the best provender that can be procured in the Islands for stock taken to sea."

The plate represents a terminal panicle of flowers, which must have a grand appearance when flowering among other stove plants. —(Bot. Reg., *April.*)

ART. IX. *Short Communication.*

ROBINIA *hispida var.* A new variety of the rose acacia was lately exhibited at the Massachusetts Horticultural Society, which was much more beautiful than the old one; the original plant was imported from Liverpool, under the name of the "new rose acacia:" it is free from that hairiness which covers the stem and branches of the R. hispida; the flowers are also produced in more dense clusters, and of rather better formation; in respect to its growth and hardiness, it is similar to the latter; it should be extensively cultivated; perhaps few persons are aware that, if the branches of the acacia are cut in after the first bloom, they will flower finely in August.

Yours, J. K.

June 22, 1835.

REVIEWS.

Art. I. *The Gardener's Magazine, and Register of Rural and Domestic Improvement.* Conducted by J. C. Loudon, Esq , F. L. S. H. S. &c. In monthly 8vo. numbers, 1s. 6d. each. No. LXI., for April.

The first article is a continuation of notes on "Gardens and Country Seats," by the conductor; exceedingly interesting, but does not contain any very useful information to our readers.

Art 2 is a "Working Plan, for laying out and planting a suburban flower-garden, containing about a quarter of an acre," by the conductor. "Our object," he says, "in giving this design is, to show in what manner some variety of form may be given to flower beds, in a case where scarcely any circumstance is propitious; and also to show that, in planting these beds, a considerable collection of trees and shrubs may be employed, so as greatly to enhance the beauty and interest of the scenery."

The plan is very excellent, and although it would not probably be exactly adopted by any one in laying out a garden, yet it gives a good idea of what constitutes beautiful arrangement of a very large number of species and varieties of plants, so as to combine the useful with the interesting and beautiful, without creating confusion, or inelegant forms. We should be happy to copy the plan into our Magazine, but as it takes up two pages, and could not be executed without great expense, we must forego the pleasure.

It represents a plan of a piece of land fifty feet in width, and two hundred feet deep—a walk runs very nearly parallel with the boundary line (with the exception of being curved at the corners, and one or two other gentle curves) around the whole garden; on the turf, between the walk and the fence, a choice collection of herbaceous plants, shrubs and trees are planted: the lawn occupies the whole space between the walks, and nearly the length of the garden; near the edges of the walks are also planted, herbaceous plants, shrubs, trees, &c., in groups of diversified forms.

"In the disposition of the trees, the object is, to preserve an irregular-sided vista along the centre of the lawn; to break the formality of the straight lines of the walks and fences on each side of it; to conceal the termination of the lawn, and hide the asparagus beds; [which occupy the extreme end of the garden the whole width;] and to vary and partially conceal the scenery of the neighboring side gardens and of the country beyond."

"The principle of guidance in the selection and disposition of the shrubs is, partly to coöperate with the above object; but principally to produce an agreeable variety of flowers and foliage throughout the whole space, and during every month in the year. For this purpose, certain evergreens (such as the laurustinus), and certain flowering shrubs (such as the China rose), are distributed throughout; the same variety of the species not being repeated, but different varieties. There are also shrubs for flowering at every season of the year: such as the Chimonánthus and Cydònia japónica for autumn and winter; the mezereon for early spring; the common azalea and rhododéndron for the beginning of summer; the clethra for August; and the arbutus and wych hazel for the latter part of the season. The whole of the trees and shrubs are of kinds which do not require peat earth, and may be purchased at moderate prices."

The following is the list of trees and shrubs enumerated to ornament the garden; they are all hardy, with the exception of a few kinds; and as the list may be useful to gentlemen planting lawns or pleasure grounds, we give it entire.

The prices are put to each plant as they are to be obtained in England; but as they vary considerable from those of our nurserymen, we have altered them as they may be had in the vicinity of Boston or New York; some are not to be found in their catalogues. Those which are tender and need protection are marked thus *.

"1. *Pyrus* spectábilis, the showy-flowered Chinese crab tree, 50 cents.
2. *Quércus I'lex*, the evergreen oak, $1.
3. *Thùja* occidentàlis, the American arbor vitæ, 50 cents.
4. **Laùrus* nóbilis, the sweet bay, 75 cents.
5. *Juníperus* virginiàna, the red cedar, 50 cents.
6. *Cytisus Labúrnum*, the common laburnum, 50 cents.
7. *Pyrus* aucupària, the mountain ash.
8. Pàv*ia* rùbra, the red-flowered small horsechesnut.
9. *Pyrus* pinnatífida, the cut-leaved sorb.
10. *Cratæ'gus* odoratíssima, the sweet-scented hawthorn.
11. *Cratæ'gus* Arònia, the aronia (yellow-fruited) hawthorn, 50 cents.
12. *Cratæ'gus* Crús-gálli, the cockspur hawthorn, 25 cents.
13. *Cratæ'gus* tanacetifòlia, the tansy-leaved hawthorn, 50 cents.
14. *Cratæ'gus* cordàta, the heart-leaved hawthorn, 25 cents.
15. *Bérberis* aristàta, the awned-leaved berberry.
16. *Cratæ'gus* Crús-gálli var. salicifòlia, the willow-leaved cockspur hawthorn.
17. *Cratæ'gus* coccínea, the scarlet-fruited hawthorn, 25 cents.
18. *Cratæ'gus Azaròlus*, the azarole hawthorn, 50 cents.
19. *Cratæ'gus* nìgra, the black-fruited hawthorn.
20. *Cratæ'gus Oxyacántha* var. flàva, the yellow-fruited hawthorn, 37½ cents.
21. Gymnócladus canadénsis, the Kentucky coffee tree, 50 cents.
22. Piptánthus nepalénsis, the Nepal piptanthus.
23. Kölreutèr*ia* paniculàta, the panicled-flowering kœlreuteria, 50 cents.
24. Liriodéndron Tulipífera, the tulip tree, 50 cents.
25. Gledítsch*ia* triacánthos, the three-thorned honey locust, 37½ cents.
26. *Ailántus* glandulòsa, the ailanto, 75 cents.
27. *Cércis Siliquástrum*, the Judas tree, 37½ cents.
28. *Cérasus* virginiàna, the Virginian bird-cherry, 50 cents.
29. *Cytisus* alpìnus, the Scotch laburnum, 50 cents.
30. Robìn*ia* viscòsa, the glutinous locust, 25 cents.
31. *Cratæ'gus Oxyacántha*, the scarlet-flowered hawthorn, 25 cents.

32. Cratæ'gus Oxyacántha flòre plèno, the double-flowered hawthorn, 50 cts.
33. *Magnòlia conspícua, the Yulan magnolia, $2.
34. Cytisus *L*abúrnum incìsum, the cut-leaved laburnum.
35. Robínia híspida, the rose acacia, 37½ cents.
36. *P*tèlea trifoliàta, the three-leaved shrubby trefoil, 25 cents.
37. Cérasus *Mahàleb*, the perfumed cherry.
38. *Amelánchier* Botryàpium, the snowy-flowered amelanchier, 50 cents.
39. Cérasus *P*àdus, the bird-cherry, 50 cents.
40. Cérasus semperflòrens, the All Saint's cherry.
41. *B*étula álba péndula, the weeping birch, 50 cents.
42. *P*yrus americàna, the American mountain ash, 50 cents.
43. Cérasus nìgra, the black-barked cherry, 25 cents.
44. Cotoneáster frígida, the frigid cotoneaster.
45. *P*yrus bollwylleriàna, the Bollwyller pear.
46. *Sophòra* japónica, the Japan sophora, $1.
47. *D*iospyros virginiàna, the Virginian lote tree, 50 cents.
48. Cérasus lusitanica, the Portugal laurel, 50 cents.
49. *Megúndo f*raxinifòlium, the ash-leaved box elder.
50. *A*'cer rùbrum, the red maple, 50 cents.
51. Taxòdium dístichum, the deciduous cypress, 50 cents.
52. *Æ*'sculus cárnea, the carnation-flowered horse-chesnut, $1.
53. *I*'lex *A*quifòlium var., the common holly, with smooth-edged leaves, $1½.
54. Salisbùria adiantifòlia, the maidenhair tree, $2.
55. Gledítschia hórrida, the horrid-spined honey locust, $1.
56. Aristotèlia *Mácqui*, the Macqui tree.
57. *P*rùnus doméstica myrobálana, the Myrobalan plum.
58. Halèsia tetráptera, the snowdrop tree, 50 cents.
59. *Catálpa syringæ*fòlia, the catalpa, 50 cents.
60. *E*uónymus latifòlius, the broad-leaved spindle tree, 50 cents.
61. *I*'lex opáca, the opaque-leaved holly, 25 cents.
62. Virgília lùtea, the yellow-flowered virgillia, 50 cents.
63. *Negúndo f*raxinifòlium críspum, the curled-leaved box elder.
64. Magnòlia acuminàta, the pointed-leaved magnolia, 50 cents.
65. Liquidámbar styracíflua, the maple-leaved liquidamber, 25 cents.
66. *A*mygdalus commùnis, the common almond, 37½ cents.

The following is a list of Evergreen Shrubs:—

67. Cuprèssus sempervìrens, the evergreen cyprus, 75 cents.
68. *A*'rbutus *U*'nedo, the common and scarlet arbutus, 50 cents, 8 plants.
69. *P*hillyrea angustifòlia, the narrow-leaved phillyrea.
70. *R*hámnus *A*latérnus, the common alaternus.
71. *I*'lex *A*quifòlium var., variegated hollies, $1, 23 plants.
72. *Cérasus Laurocérasus var., variegated laurel, 50 cents.
73. *R*hododéndron pónticum and catawbiénse, hardy rhododendrons, $1, 6 plants.
74. *Escallònia rùbra, the red escallonia, $1.
75. Cratæ'gus *P*yracántha, the evergreen hawthorn, 50 cents.
76. **Aúcuba* japónica, the common aucuba, $1.
77. Juníperus suécica, the Swedish juniper, 50 cents.
78. *B*úxus sempervìrens var., variegated box of different sorts, 50 cents.
79. *Cistus sp., the rock rose of different sorts, 2 plants.
80. **V*ibúrnum *T*ìnus, the laurustinus of different sorts, 50 cents, 8 plants.

The following is a list of Deciduous Shrubs:—

81. *D*áphne *Mezèreum*, the common mezereon, white, red, and autumn-flowering, 25 cents, 3 plants.
82. Chimonánthus frágrant, the fragrant chimonanthus, 75 cents, 2 plants.

83. *Hamamèlis* virgínica, the wych hazel, 25 cents.
84. Calycánthus flórida, the Carolina allspice, 50 cents.
85. *Syrínga* vulgàris álba, the white lilac, 50 cents.
86. *Syrínga* vulgàris purpùrea, the purple lilac, 37½ cents.
87. *Syrínga* pérsica, the Persian lilac, 50 cents.
88. *Vibùrnum O'pulus* ròsea, the Guelder rose, or snowball tree, 25 cents.
89. *Cýtisus* álbus, the white broom.
90. *Spiræ'a* bélla, the beautiful spiræa, $1.
91. *Colùtea* cruénta, the bloody bladder senna, 50 cents.
92. Coronílla E'merus, the scorpion senna, 25 cents.
93. Azàlea póntica, the common yellow azalea, $1.
94. Symphòria racemòsa, the snowberry, 50 cents.
95. *Spártium júnceum*, the Spanish broom, 50 cents.
96. *Cydònia* japónica, the Japan quince, $1.
97. *Cléthra alnifòlia*, the alder-leaved clethra, 25 cents.
98. *Hibiscus* syrìacus var., the althæa frutex, 37½ cents.
99. *Ríbes* sanguíneum, the red-flowered currant, $1.
100. *Ríbes* áureum, the yellow-flowered currant, 50 cents.

"The following is a list of the Climbing Shrubs for covering the privy, summer-house, a part of the boundary wall and porch, and part of the walls of the house:—

101. *Caprifòlium* flexuòsum, the Chinese honeysuckle, 75 cents, 4 plants.
102. Common twining honeysuckles of sorts, 37 cents, 6 plants.
103. *Clématis* and *Atragène* of sorts, 37 cents to $1, 6 plants.
104. *Lýcium* bárbarum, the Duke of Argyle's tea tree, 25 cents.
105. *Jasmìnum* officinàle, the common jasmine, 25 cents.
106. Ampelópsis *hederàcea*, the five-leaved ivy.
107. *Ròsa* multiflòra, and *Grevíllei, the many flowered and Greville's rose, $1, 2 plants.
108. *Wistària *Consequàna*, Consequa's wistaria, $2.
109. Giant ivy, and Ayrshire rose, 50 cents, 4 plants.

"According to the above enumeration, there need not be a dozen duplicates in the garden; for, though there are some of the species repeated (such as the laurustinus, the Cydònia japónica, the Chinese rose, &c.), different varieties of each species may be chosen. The herbaceous plants may be selected on the same principle; so that, in this small garden of not quite a quarter of an acre, nearly 800 different kinds of ornamental plants may be exhibited.

"As the trees and shrubs are not crowded together, no thinning out will be required for at least ten or twelve years, provided the pruning-knife be properly applied; but the space for the herbaceous plants will be diminished every year: for which reason we would recommend annuals and biennials to be sown nearest to the shrubs or trees; and the perennials planted only in the open spaces, where they are not likely to be disturbed for several years.

"In disposing of herbaceous plants in mixed borders of trees and shrubs, like those in the design before us, perhaps the only practical mode is, to endeavor to have some plants in flower throughout the whole garden, and of different colors, every month in the year. By the aid of our tables in the *Encyclopædia of Gardening*, this may be very easily accomplished."

About sixty different sorts of Roses are marked upon the plan, but the number may be increased, by diminishing the list of herbaceous plants.

Art. VII. contains some remarks on Rogers's "Fruit Cultivator," lately published. In this, the writer states that, the degeneracy of the Golden pippin has been a fertile subject of discussion among orchardists during the last thirty years, since Mr. Knight first suggested the idea of its degeneracy from old age. The following remarks by Mr. Rogers are then given:—

"The Golden pippin being one of our most useful and esteemed hardy fruits, the author trusts he will be forgiven for entering more at large into its history and management than he has thought necessary in the preceding notices of other inferior kinds of apples, especially as there has been, for several years past, an idea prevalent, that this country was about to lose this fine fruit for ever. In Mr. Knight's *Treatise on Orchard Fruit*, the doctrine was first broached, that all our varieties and subvarieties of fruits have but a temporary existence. They are raised from seed, flourish for an uncertain number of years, and, after arriving at their maximum of health and fertility, gradually sink to decay, and at length disappear. Taking this idea as a rule, the golden pippin was judged to be in this last stage of existence; and it was predicted, that not only were the old full-grown trees to disappear, but all the young ones, lately worked from them, would perish also. It must be admitted, that a great majority of the old Golden pippin trees in Herefordshire, and in other parts of the kingdom, were, about the time Mr. Knight wrote his treatise, in an apparent state of decay; and, moreover, that young trees of the same sort could but with difficulty be made to grow and bear so freely as they had previously done. These failures, however, were accounted for in another way than that propounded by Mr. Knight. It was observed, that the old trees, having probably all been planted about the same time, and having arrived at their natural period of healthy existence, were, like all other trees, falling to decay from sheer old age; and that the contemporaneous weakness and debility of the young lately planted trees were caused by a careless choice of grafts, by working them on improper stocks, and planting them in old worn-out soil, instead of in fresh, well-trenched, light, loamy situations. This latter opinion was the more feasible, because there were many middle-aged trees in different parts of the kingdom, which were in full vigor and bearing; and though young plants pitted in old gardens and orchards were unthrifty, such as were properly planted in newly broken-up ground, provided they were worked on the best crab stocks, succeeded as well as ever.

"This being the opinion of the author respecting the failure of the old Golden pippin, and other old sorts of apples, he gave the subject his best consideration, and set about proving how far his own conjectures were well or ill founded; and, after the experience of forty years, he has come to the following conclusion; viz., that if crab stocks be raised from the most healthy wild trees, properly treated, and planted out in the nursery, and worked with the most healthy moderate sized scions, cut from the top of sound healthy trees, and, when fit for final transplantation, be placed on well-trenched light fresh loam, having a dry bottom of rock or chalk, the trees will assuredly prosper without fear of disappointment. On the other hand, if the grafts be taken indiscriminately from any tree, or from any part of a tree, and placed either on free or paradise stocks, the young trees so raised will, nine times out of twelve, be in some respect or other defective; and particularly if they be not afterwards planted in their favorite soil, where their wood would not be sufficiently ripened.

"The Golden pippin requires a dry and moderately warm climate. The best fruit are produced in Normandy on the Continent, in Sussex in England, and on walls in Scotland. The south of France is too warm, and the richer counties of England and Ireland are too moist. This apple is supposed to have been first raised at Parham Park, on the south Downs of Sussex.

"It has been noticed of late years, that neither the Golden pippin nor

> Nonpareil keep so well as formerly. The author well remembers, that, sixty years ago, both these kinds of apples were plentiful in May; but it is not so at present. This is attributable to two causes; our summers lately being more moist, and perhaps too many free and paradise stocks used in the nurseries. It has been deemed a good practice to raise the Golden pippin from cuttings or layers. This plan is quite practicable; and some practitioners have been very successful in raising plants from cuttings. intended for potting. Trees may also be raised by layers from stools kept on purpose in the nursery."

Mr. Rogers recommends Millett's Mignonne peach, for forcing in pots or boxes. Mr. Brown, gardener to the late Lord Cremorne, at Chelsea, kept all his in tubs or boxes, like orange trees, for years, and supported them chiefly by the use of liquid manure. This was composed of soft water, horse droppings, and a little soot. The sorts Mr. Brown considered best for growing and forcing in this manner were, the French Mignonne, Violette hâtif, Early admirable, Millet's Mignonne; and, for later fruit, the Bellegarde.

In the Review Department we find notices of the three first annual Addresses delivered before the Massachusetts Horticultural Society. We had the opportunity last fall of sending these pamphlets to the editor, with others, by a friend, thinking it would be a source of gratification to the authors of the addresses, as, also, a great pleasure to our Horticulturists, to let our transatlantic friends see how rapidly we are progressing in the various departments of gardening, literary as well as scientific. The reviewer says, "These Addresses are eloquent and exceedingly well written. It is delightful to see the independent and patriotic spirit displayed in the toasts, and in the explanatory sentences which accompanied the different epithets."

In our last we were obliged to omit our review of the March number of this Magazine; it being in type, we now present it to our readers. The 1st article in this number is "*an excursion in search of Orchideæ, up the river Masseroni*," in Demerara. By Mr. Henchman.

> "After a tedious passage," he says, "of nearly two months, it was with great pleasure, and in the highest spirits, that I landed in Georgetown, Demerara, on the 12th of March, 1834. The appearance of Demerara from the sea is by no means inviting, nothing being visible except a dense mass of mangrove bushes, many of which are growing within the limits reached by the tide. Justly has Demerara been called the land of mud: not a grain of sand, not a single rock does it present, for the eye to rest on; and were it not for a few cocoa-nut and cabbage palms, and a tall chimney or two, which are visible, at intervals, along the coast, one could scarcely credit that such a spot could have been selected for a European settlement."

On the 13th of April he sailed for the Ampa creek:—

> "Ampa is situate about sixty miles from the mouth of the river Essequibo; and there being many Indians who were in the habit of frequenting Ampa, Mr. Mackie promised to procure some to paddle me up the river. The majestic Essequibo is said to contain from three to four hundred islands. Among the largest are Laguon and Wakenham, which produce, perhaps, half the sugar exported from Demerara. Higher up are Hog Island and Fort Island; the latter of which was formerly the seat of the Dutch govern-

ment, and on which an old fort and a bomb-proof magazine, in perfect repair, are still remaining. These, and many other large islands, are thickly interspersed with smaller ones, exhibiting every possible variety of size and shape, of which the chief beauty consists in their being, one and all, covered with vegetation to the water's edge."

After proceeding up the river Masseroni several miles, Mr. Henchman, with his six or eight Indians, landed on the banks of the river about 6 o'clock, for the night; his account of his night's repose, is exceedingly interesting:—

"The sun sets in Demerara from six to a quarter past, and in ten minutes after, perfect darkness succeeds: so that our dinner was eaten by the light of our fire: and about seven o'clock we all turned into our hammocks; the Indians soon sinking into their slight watchful repose, while I was thinking over the events of the day, the discoveries made, and treasures collected, and forming plans for future expeditions. It sometimes happened that I awoke in the night, and found myself swinging in my hammock between two trees; the moon, perhaps, shining full upon my face; the silence of the night and the solitude of the forest unbroken, save by the dull sound of the waters as they foamed over the rocks; the roar of the jaguar, as he roamed through the bush in search of his prey; the shrill cry of the ourang-outang, which seemed to thrill through me; the still more disagreeable moan of the baboon; or any of the other noises peculiar to the bush: and one whose imagination was at work might have fancied, as the light land breeze whistled gently through the trees, or disturbed a few of the dry leaves, that the bushmaster was wreathing himself round one of the branches of the tree which supported the hammock; or that some other of the many large snakes with which this country abounds was trailing its colossal body beneath. This combination of sounds, till the senses became accustomed to it, produced a feeling of mixed pleasure and pain; nor was this diminished by the flapping of the wings of the large vampire bat, as he occasionally passed within a few inches of my nose; for I candidly admit that, though the presence of this bird or beast did not give me any uneasiness, I did not, like the immortal Waterton, feel any peculiar wish to experience, when I awoke in the morning, the pleasure of finding that my great toe had been punctured by this treacherous foe, and that I had lost twelve or fourteen ounces of blood through its agency. If anything more could be wanting to complete the interest which a European must feel in such a situation, he need only reflect on the beings who are sleeping around him, part of whom are in a state of entire barbarism; while the others, to the ignorance of the savage, add but too often the acquired vices of the unfortunate negro."

"On the 23d, I reached the Indian settlement of Wamokai, which is supposed to be about 700 miles from the mouth of the Essequibo; and I determined, with much regret, to retrace my course, after one more day's progress up the river; for the limited space of my canoe was already pretty well filled with specimens of *Orchideæ* which I had collected. The Masseroni, for about 400 or 500 miles from its junction with the Essequibo, abounds in rapids, and in falls, none of which possess more than perhaps 5 ft. or 6 ft. of perpendicular fall; yet there is often a succession of small falls, which renders the descent of the river sufficiently dangerous. Some of the principal of these falls are, Waranambo, Aman, Wapopekai, Sarpua, Parokas, and Tekie, which are the last and most dangerous. In proceeding up the river, the canoe was hauled up over some part of the rocks, where there was but a small body of water. I used to laugh much at the Indians, as they were floundering about in the water, hauling and shoving at the canoe; but I was given to understand that they expected to have the laugh against me in descending or shooting the falls, for which process the main fall is always chosen, as there is less danger of sunken rocks: and I candidly own that, although my face showed the utmost composure to the Indians, I certainly thought, when shooting the falls of Tekie, that I stood a good chance of losing the produce of my labors, and perhaps my life, as I can only swim, like a stone, to the bottom. At the falls of Tekie the river falls about 6 ft., nearly perpendicular; and, the channel being narrow, the rapidity and rush of the water is very great. About 40 ft. below the fall the river makes a sudden curve, occasioned by a line of pointed rocks stretching out from the shore; and, as the canoe, impelled by the force of the current, and the united exertions of the Indians, who are obliged to paddle hard to keep steering on the canoe, dashes like lightning down the fall, it appears that it must be inevitably dashed on the rocks, which are immediately under its bows: but a single turn of the steersman's paddle causes the light obedient canoe to swing round broadside to the rocks; and a strong sweep of the paddle takes it far out of danger. But think not that we escaped altogether free; for, in coming round in the boiling surf, a wave struck the side of the canoe, and filled her half full of water, though, fortunately for me, the water, being fresh, did not much injure my plants. On the morning of the 30th, I reached Ampa again in safety; and, although, during that time, I had lived upon fresh fish, without salt (the Indians having left behind the salt I had procured in Georgetown), and a little bitter cassava bread, with pure water to wash it down, I never enjoyed myself more in my lifetime, and was only sorry that circumstances prevented my following the course of this beautiful river to its source."

Mr. Henchman collected many new species of the Orchídeæ. most of which survived the voyage to England, and are now "in thriving condition."

Art. 2. *Design 9th, for a Kitchen Garden of four acres.*

A good plan; but, like all the series, not interesting to our readers, without the accompanying plate.

Art. 3. *Design for the Pleasure Grounds, Flower Garden, and Kitchen Garden of a Mansion.*

A plan furnished by Mr. William Dargavell to the Dumfries Horticultural Society, from whom the author received the prize offered for plans of gardens: the Conductor's remarks on the comparative merits of the plan, and the principles of criticism by which such plans should be analyzed, are too valuable to pass over.

"In the composition of a plan, as in that of a picture, a piece of music, a poem, a discourse, or, in short, anything that is to form a whole, there are certain principles common to the art of composition, and certain rules derived from these principles, which belong to each particular art. For example, a universal principle is, that all the parts of a composition should unite in forming a whole; and a rule applicable to the plans of kitchen gardens is, that the walls, walks, and the borders of the boundaries and compartments, should be straight lines. We state this to show the difference between a principle and a rule. The rule admits of exceptions; for a kitchen garden may sometimes, from necessity, have a circular or curved wall: and this would involve curved lines in some of the borders and walks. A principle, however, admits of no exceptions; for, whatever lines may be employed in the composition of a garden, they must unite in forming a whole. Now, there is not a single part of any plan or composition, however small or trifling it may seem to be, which cannot be either justified or condemned by a reference to principles and rules, with as great certainty as the nouns, verbs, prepositions, articles, &c., in a sentence can each be justified or condemned by the laws and rules of grammar. All the difference is, that the principles and rules of grammar are universally known, because universally required for the purposes of human intercourse; while those of composition in the arts of design are known imperfectly and partially, owing to the limited demand for works of art. Let no one, therefore, imagine, when we approve of, or find fault with, a design, that it is merely a matter of taste. The taste of a design, or a discourse, is quite a different thing from its correctness with reference to principles. A garden might be designed in strict accordance with the principles and rules which are approved of by mankind generally, and yet not so as to suit the taste of an individual. In that case, no fault is to be found with the artist by any one but by his employer; who has a right to say, 'What you have done is perfectly just and correct; but I prefer having it thus, because such is my particular taste.' "

Articles 4 and 5 are accounts of some remarkable timber trees growing in various parts of England.

ART. II. *The Floricultural Cabinet, and Florist's Magazine.* Conducted by JOS. HARRISON. In monthly octavo Nos. 8vo. 6d each. For February.

WE noticed the number of this work for January, extracting some portions which we thought useful to our readers. The number for February contains a long article on the Dahlia. Although two excellent original papers have appeared in our work, on the cultivation of the Dahlia, yet we cannot refrain from giving an extract from this, which we think will be read with much pleasure. The Dahlia, though common and grown in most every garden, as it certainly should be, is yet far from being brought to the perfection with us, to which it has attained with the English gardeners; and although the last two seasons they have not flowered well, yet we hope no exertions will be spared, or experiments left untried, to make that display of their splendid flowers, which is so highly desirable.

"An impression," says the correspondent, "has been entertained by many persons, that the Dahlia is a native of a very hot country, but such is decidedly erroneous, for Mexico, in North America, (from whence it was imported,) although situated between the tropics, possesses the properties of a temperate climate, highly fertile, and yielding some rare productions of nature. It follows, therefore, that our climate is in point of temperature, somewhat more assimilated to the native clime of the Dahlia than has been pretty generally imagined; and, considering our national ardor and skill in Botanical research, with the highly cultivated soils used in the pursuit, England must stand unrivalled, and claim the palm of excellence, in the culture of the Autumnal Emperor of the Floral World."

The propagation of the Dahlia from cuttings, which makes part of the article, is so similar to that already detailed by Mr. Mackenzie,

(p. 172), that we pass over it, and come to the planting out of the roots; for "on this and the subsequent treatment much depends the success and beauty of the forthcoming bloom."

> "The last week in May, or first in June, I consider the most safe and proper time for this work; for it is calculated on an average of years, that there are only two months in the year, viz. July and August, in which the thermometer is not liable during some part of the night, to fall as low as 32°.
>
> "The soil intended for the reception of the plants should have been laid up in ridges during the preceding winter and spring, and should consist of a good sandy loam, well manured with old frame dung, also well exposed to the previous winter. If the loam partakes of a heavy or saponaceous quality, a tolerable portion of river sand should be united with it. Or well decomposed road stuff will be found of advantage to intermix with the whole; but I most distinctly wish to be understood, that although so great an advocate for the use of well-neutralized manure, I at the same time strongly advise that that use should not be indiscriminate or disproportionate to the quantity or nature of the soils with which it is united, or it will be found to produce a repletion of growth, by no means desirable to attain.
>
> "The variegated varieties should be grown in a fine sandy loam or peat, nearly or wholly destitute of manure, according to their specific natures, or they will be liable to run too much, and exhibit self-colored flowers; and in the event of any such appearing, they should be taken off the plant as soon as ascertained.
>
> "Wherever the size of the garden will admit of it, four or five feet space each way should be allowed between the plants, by which their health and strength will be much improved, and will show to far greater advantage than if planted close.
>
> "I much advise that the plants, on being turned out of the pots, should not be planted too near the surface. No apprehension need be entertained that the lower portion of the stem of the plant then surrounded by the soil will rot, for vegetation advances rapidly with the Dahlia, and the lower part of the stem gradually attains a strong woody substance.
>
> "It is most important to keep the plants regularly supplied with moisture, using rain or river water and applying it gradually by means of the water-pot, always after sunset; and the ground being covered around the plants with two inches deep of old dung, will much increase the brilliancy of the self-colored blossoms. Be most careful to secure the plants by means of proper stakes, one near the centre stem, and several round the outsides of the lateral arms, tied with bass strings, to guard against the powerful effects of strong winds.
>
> "Avoid as much as possible planting Dahlias near trees, walls or close fences, or they will be drawn up weakly; the more airy and open the situation the better, and if any exhibit symptoms of running up disproportionately, or exuberant, it may be somewhat retarded by firmly treading the earth round the root.
>
> "If planted in pots, it should be in twelves or eights, and may be trained to frames, Geranium fashion, having one strong support to the main stem of the plant: and the surface of the soil should be covered with moss, or fine old dung, and the pots not exposed to the full glare of the mid-day sun, or no moisture can be preserved."

The earwig is very troublesome to the English amateurs, (the same, we presume, that infests the carnations,) and often their best blossoms are spoiled by their depredations; to prevent this, "pieces of hollow reed, cane or dry rhubarb stem, a few inches long, inserted among the stems and foliage will entrap them."

MISCELLANEOUS INTELLIGENCE.

Art. I. *General Notices.*

Analysis of the leaves of the Mulberry.—M. D'Arcet (the son) sends a letter upon a chemical analysis which he has made of the leaves of the mulberry. The result of this analysis shows that the mulberry leaf contains four parts in the 100 of azote. It may result from this composition of mulberry leaves, that silk being a product in a high degree supplied with azote, as an ingredient, mulberry leaves for the nourishment of silk worms could not be advantageously substituted except by other leaves which also contain azote. Then, as it is not known whether other leaves contain as much azote, he will, to that end, make the analysis of such other leaves as are considered proper substitutes for mulberry leaves.

M. Chevreul says that the presence of azote has long been known in the leaves of the mulberry, and likewise in the leaves of many other plants; that the difference which is said to exist between animal and vegetable substances, relatively to the presence of azote in the former, has always been faulty —because, that if, in the mass, there existed more azote, proportionally, in an animal than in a vegetable, still there were immediate products of animals which contained very little azote, and even none—while there were immediate products of vegetables which contained much azote—and *vice versa.* It is not then only the analysis of the vegetables which is necessary, according to M. Chevreul, but also the analysis of their immediate products—and especially, to understand well what of the immediate products serve for the nourishment of the silk worm—since it is well known that insects, even more than other animals, have the property of rejecting, among the vegetable substances on which they feed, and almost as they are taken, those parts which cannot serve for their nourishment, and for the preparation of the secretions which the insects yield.

M. Ardouin adds, in support of what M. Chevreul says, that there are many kinds of caterpillars which produce silk, and in as great quantity as the silk worm, and which live on trees which cannot furnish support to the silk worm.

M. Peyen says that, according to his own experience, all the vegetables upon which experiments have been made contain azote *dans un principe continu* from the extremities of the roots to the extremities of the leaves—and even in the petals of the flowers, and principally of the stigmas.—*Farmer's Register.*

Art. II. *Foreign Notices.*

A nosegay of fruit.—At the late grand fête at Wentworth House, there was placed in the refreshment room, a *bouquei de fruit;* composed of every variety of grapes, prunes, peaches, nectarines, &c. five yards in circumference, and valued at £600.—*Gard. Mag.*

New seedling grape vine.—Mr. Wilmot, a nurseryman near London, is selling this season, plants of his new seedling vine. It is highly spoken of as a most excellent white grape; the price per plant is 10*s.* 6*d.*—*M. Saul*, in N. Y. Farmer.

Myatt's new seedling pine strawberry is stated by Mr. Saul to be highly esteemed in the English gardens, it sells at nearly double the price of other kinds.—*Ib.*

The heaviest gooseberries produced in England last season were, Young Wonderful (red), 27 dwt. 8 gr.; Duckwing (yellow), 23 dwt. 24 gr.; Providence (green), 25 dwt. 9 gr.; Eagle (white), 25 dwt. 22 gr. There are five new red seedlings going out [an English phrase, denoting the time when new seedlings are first offered for sale—*Conds.*] this season, and only one yellow one; there are three green ones, and three white ones.—*Ib.*

Beet root sugar.—The manufacture of beet root sugar in France, has afforded enormous profits to the manufacturer; from a report of a committee appointed by the French chambers, it appears "that this sugar, not being liable to duties in any way proportioned with those levied on the colonial article, has established a competition in the home market which is highly injurious to the importer of, and the dealer in the latter. The number of manufactories of beet-root sugar in various parts of France has been increasing rapidly of late years. Land destined for the cultivation of beet-root is let at a higher rent than for any other production. About 18,000,000 kilogrammes, equal to 36,000,000 lbs. or 18,000 tons, a year, of the article are manufactured, according to the latest estimates, and the profits it yields to the manufacturer are enormous. The committee recommend that beet-root sugar should be taxed in such a way as to be of advantage to the revenue, without being injurious to the interests of the colonial planter and the refiner of colonial sugar."—*Ib.*

New Turnips.—A hybrid variety, between the green-topped Swede, and the green-topped white globe, has been raised by Mr. James Wright of Lauton, Strathmore, Pertshire, Scotland;—it is stated to be a valuable turnip for field culture, and to be hardier than any other white turnip, and yielding greater crops.—*Quar. Jour.*

ART. III. *Domestic Notices.*

Salisbùria adiantifòlia, or *Japan Jingo tree.*—This fine tree, which was not long since transplanted from the once beautiful garden of the late Gardner Green, Esq., to the Boston common, seems likely to flourish well. It is nearly forty feet in height, and three feet from the ground measures four feet in circumference; probably the largest tree ever moved in this vicinity. Such a fine specimen of this noble tree, the city may be proud of possessing upon its grounds.—*Conds.*

Ripe grapes.—Grapes of the Black Hamburgh and other kinds, were cut on the 20th of May, at Col. T. H. Perkin's, by his gardener, Mr. Cowan; probably our readers recollect our notice of the vines at p. 191.—*Ib.*

Pine apples.—Two pine apples were cut at Belmont Place, by Mr. Haggerston, a few days since, perfectly matured. A black Jamaica and two others, are now nearly ripe.—*Ib.*

Mr. Michel's Garden, near Charleston.—We have been highly gratified with a visit to the Flower, Fruit, and Vegetable Garden of our enterprizing and tasteful fellow townsman, J. Michel, Esq., attached to his residence in

St. Philip's street. Notwithstanding the extreme and desolating severity of the past winter, and the lateness and coolness of the spring, his garden exhibits a most luxuriant and enchanting appearance, teeming with a profusion of rich, rare and useful products, abounding in the choicest gifts of Flora, Pomona and Ceres, and forming, with its varied and lovely hues, an optical feast, and with its delightful odors, an olfactory concert. The floral wealth of his enclosure is immense; about 400 Rose trees, embracing 250 varieties, unfold their banners of beauty, and open their fragrant censers—and of these no less than 250 are Moss Rose Trees—the white, red, dark red and royal Moss—in full bloom. The Plumeria (B.) or Franchipane (F.), the Microphylla Rose, the stately Lady Tankerville, and the Root and *Tree* Peony, (the bloom of the latter of these being a novel triumph of horticultural skill in this State) contribute their respective charms to the attraction of the scene. In the fruit department, we perceive the Strawberry—including the Bishop Superb and the Wilmot Superb—as inviting to the eye as it is luscious to the taste—four varieties of the Cherry, already of brilliant red, and nearly ripe—with twenty varieties of the Pear and French Prune, covered with the richest profusion of young fruit; and among the hot-house exotics, are the Lime Tree, and three varieties of the Banana, from which fruit is expected next year, and would probably have been realized this season, but for the Siberian aspect of the past winter in our Southern clime. The Kitchen-Garden, too, is vigorous and *forward* in its growth—manifesting either favoring influences or unwonted skill.

The horticultural success of Mr. Michel, is due chiefly to his personal zeal and industry, and a knowledge drawn, not from books, but from actual and patient experiment. He has spared no expense to enrich his garden with the rarest exotics, both of the ornamental and the useful kind, and has succeeded wonderfully in naturalizing them—in enlarging the limits of our vegetable citizenship. But it is in the processes of grafting, and budding or inoculating, that he has achieved some of his greatest triumphs—the former being done with so much nicety, as almost to hide from detection the point of union between the parent stem and the inserted shoot; and the latter shewing, in one instance, no less than nine varieties of the rose on a single bush.

We learn that Mr. Michel intends devoting himself with even more zeal and industry than hitherto, to the horticultural art, his proficiency and success in which have been already testified by a number of premiums from the Horticultural Society of this city; and will, in aiming to supply the place of the deceased Mr. Noisette, dispose of fruit trees, plants and flowers at suitable prices.—*Charleston Courier.*

Silk Societies. Societies for the raising of mulberry trees, the feeding of silk worms, and the manufacture of silk, have been formed in several of the New England states; a Society was also formed at Long Island in May.—*Conds.*

The Columbian Horticultural Society at Washington, and the Pennsylvania Horticultural Society in Philadelphia, held their annual exhibitions the early part of last month:—we hope some of our friends at the South will favor us with some account of the things presented, in time for insertion in our next number, that our readers may be informed of the beauty and choiceness of their productions.—*Ib.*

Cypripèdium Calceòlus and Sarracèna purpùrea, have lately been beautifully in flower, in the green-house of J. P. Cushing, Esq. They were taken up from their native habitats, placed in pots in a shady situation for a few days, until rooted, and then carried to the green-house to flower.—*Ib.*

The weekly premium of the Maryland Horticultural Society for Early York Cabbages and Radishes, was awarded to Mr. Edward Doran.

Large cucumber.—We have lately seen a very fine cucumber, cut from the garden of Wm. Pratt, Esq., Oakley Place, which measured upwards of twenty inches in length. The kind was called Walker's green; the seed was procured in England by Wm. Pratt, Jr.

The Scarlet Trefoil is stated in Loudon's Magazine to be extensively cultivated and much approved of. 'Cattle are extremely fond of it; farm horses, during their spring work, may be kept in the highest condition upon it; and, after affording abundant feed, the land may be prepared in time for turnips or barley.' This species of clover is very little known in our vicinity; independent of its value as above stated, it is very ornamental when planted in pleasure grounds; perhaps many of our readers recollect a large patch of it, which was planted in front of the cottage at Mount Auburn, two years since; its appearance from the road was very beautiful. We hope some of our farmers will try it, and ascertain whether, in our climate, it will prove as valuable as in England.

Robinia hispida.—We have lately seen, at Hawthorn Grove, the residence of M. P. Wilder, Esq., a branch of the Robinia hispida in flower, grafted upon the old stock of the R. pseudacàcia. The scion was put in about four feet from the ground. The flowers have a fine appearance when so grown, and show to much more advantage than in the shrubby state it is generally seen.—*Conds.*

Vernal Flowers.—The double Snow drop (*Galanthus nivalis*) was in bloom on the 8th instant, in a sheltered border, and the single snow drop a day or two later; but this was not according to the order of nature, for single flowers are generally earlier than double flowers of the same species. The difference in the present case was occasioned by setting the single flowers rather *too deep.* As the bulbs are very hardy, I hope to be more particular in future, for I enjoy the first message of Spring too much to have it willingly deferred for a single day.

The cup or nectary of the single Snow drop is painted green on the inside, but most delicately; and slightly tipped with the same color on the outside. Its three petals are of a lovely white; and altogether it is a beautiful flower—perhaps more so than the double variety which is crowded in the centre with greenish leaves. It is pendent; waits for the sunshine before it expands, and closes up, as if chilled, in the shade. Its whole existence above ground, indeed, is limited to a most fickle season.

I had not searched for the Snow drop, in the open ground, for some days, because the garden has been covered with snow; but this afternoon I found it had melted off within a few hours, and this plant, as well as *Eranthis hyemalis,* was fairly in bloom. The latter was particularly mentioned in my sketch of last year.

The leaves of the Cloth of Gold, *Crocus,* were protruding, and one fair day will probably be enough to bring forth its flower, which (like those on the borders of perpetual snow) almost rests on the ground. The white flamed Crocus opened yesterday in a sheltered place, though it is not so early as the former kind, when they grow side by side. These flowers may justly rank among the loveliest ornaments of spring.

I have no shrub so forward in its vegetation at this time as *Spiræa spicata,* a native of the mountainous regions of Nepaul. Last year I noticed the early starting of the Tree Pæonia and Japan Quince, but this far exceeds them; and already its large buds are opening. As it is much of a stranger, I cover it with a box every night, lest its flowers should be damaged by the severe weather that seems yet disposed to linger in this quarter.—*Genesee Farmer, May.*

State of Vegetation in the Vicinity of New York.—Dear Sirs: Having made in my ramble to day, some few notes of the State of Vegetation in this vicinity, (N. Y.) I send you a copy of them, which perhaps may be acceptable to your Magazine. If so, they are at your service.

The severity of the winter has killed down most kinds of foreign Grapes, China-Roses, Jasmines, &c., this season, which have hitherto endured the winter without any material injury. Esculent vegetables are considered full 10 days later this spring than the last. Asparagus comes to market very fine, but is dear, 18 cts. the bunch. Radishes, 3 cts. the bunch—other vegetables, as Spinage, Parsley, and the like, are scarce and dear. Peach Trees flower weakly, and I much doubt of a crop. Cherries, Pears, Apples, Gooseberries and Currants, flower strong and abundantly, and many trees are well set with healthy fruit; and there is every indication of a good crop of all the above mentioned varieties.

In the Flower Garden there are in flower the early varieties of Phlox, Tulips, Anemones, Violets, and the like, and at many places I noticed the Judas tree in flower. Lilacs of varieties, and some few early flowering shrubs. I must not forget in this place to mention the gratification I received in calling at Mr. Prime's place, Hell-gate, where I was politely showed through the Graperies, &c. by Mr. Aslop, the gardener. I do not recollect at any time seeing Grapes and Peaches (in a young state) forced to a better advantage.

In the first forced Hot-House, the Peaches were ripe and some had been gathered some days. The white sweet-water Grape was ripe, and the Black Hamburgh only required a few days' sun to ripen it. The vines and Peach Trees are very healthy, and they are fine and well colored for the season. The next House, which is a Green House, the Grapes trained under the glass are in flower and show a moderate crop, and the third House of the range is a Vinery now well set with fruit and fine shouldered bunches. In entering the new range I was first shown into a Peach House (the last end of the range). The Trees are trained under the Glass in front, and in the back of the House, on a curved trellis, in front of which, are some small dwarf Peach Trees very full of fruit. In this House, the Pitmaston Oatland and Elruge Nectarines, looked extremely well, and have fine crops of fruit now in the process of stoning.

The second and third Houses are intended principally for Graperies; the vines are trained up the rafters and are now showing their bunches of fruit very strong and healthy, especially the Muscat of Alexandria, Black St. Peters, B. Hamburghs and many choice kinds. On the back trellis of these Houses is trained the Washington and Magnum Bonum Plums, which are well set with fruit in state of stoning; there are also Trees of the Moor Park Apricot, with a good show of fruit: and the Houses altogether have an excellent show of fruit on the trees and vines that are clean and healthy. Mr. Aslop also showed his Mushroom bed, which was more prolific than any I have seen for some years, and he informs me he has a general success, which I hope will be encouraging to other cultivators to grow the fine vegetable. The Kitchen Garden was in a state of forwardness for the season, and every department had a neat corresponding appearance.

From Mr. Prime's I called at Mr. Rylander's, and was shown their Orangery by the gardener. The Orange and Lemon Trees here are of a large size, well loaded with some of the finest fruit I ever saw. The House is the old fashioned dark-roof, with upright sashes, which appears particularly adapted to the Orange and Lemon in this country. There is a fine new Green-House now nearly completed attached to it, which is intended for Grapes and Plants. *Yours, E. Sayers, New York, May 20th.*

Art. IV. *Quincy Market.*

Roots, Tubers, &c.		From $ cts.	To $ cts.
Potatoes:			
Common,	per barrel,......	1 00	1 25
	per bushel,.....	37½	50
Chenangoes,	per barrel,......	1 25	1 50
	per bushel,.....	50	62½
Eastport,	per barrel,......	none.	
	per bushel,.....	none.	
Nova Scotia,	per barrel,......	1 00	1 25
	per bushel,.....	37½	50
Turnips:			
Common,	per barrel, (old)...	none.	
	per bunch, (new)...	8	10
French, per bushel,...........		none.	
Onions,	per barrel, (old)........	none.	
	per bunch, (new).......	3	6
Beets, per bunch, (new).........		12½	
Parsnips, per bushel,............		none.	
Carrots, per bushel,..............		none.	
Asparagus, per bunch,..........		6	
Radishes, per bunch,............		3	6
Horseradish, per pound,.........		none.	
Garlic, per pound,...............		none.	
Cabbages, Salads, &c.			
Cabbages, per dozen heads:			
Old,.........................		none.	
Early York, each, (new).......		12½	15
Rhubarb, per pound,............		6	8
Cabbage sprouts, per peck,......		17	20
Beet tops, per peck,.............		10	12½
Dandelions, per peck,...........		none.	
Lettuce, per head,........... ..		3	6
Spinach, per peck,..............		12½	
Peas,	per bushel,.............	1 00	1 25
	per peck,...............	25	50

Squashes and Pumpkins.		From $ cts.	To $ cts.
Canada, per cwt..............		none.	
Common crook-neck,...		none.	
Lima,......................		none.	
West-India,.................		4 00	
Pot and Sweet Herbs.			
Parsley, per half peck..........		50	
Sage, per lb..................		20	30
Marjoram,.....................		50	
Savory,.......................		25	37
Spearmint,....................		50	
Fruits.			
Apples:			
Baldwins,	per barrel,.......	none.	
	per bushel,......		
Pearmains,	per barrel,.......	none.	
	per bushel,......		
Russetts,	per barrel,.......	4 00	4 50
	per bushel,......	2 00	2 25
N. Y. Pippins, per barrel,....		none.	
Pears:			
Iron white, for baking........		none.	
Strawberries, per box..........		25	50
Cherries, per quart.............		17	25
Gooseberries, (green) per quart..		12½	17
Currants, (green) per quart......		6	8
Quinces, per bushel,............		none.	
Cranberries,	per barrel,.......	10 50	
	per bushel,......	4 00	
Cucumbers, each,...............		12½	25
Pine Apples, each,..............		10	37½
Oranges, per hundred,......... .		2 50	3 00
Lemons, per hundred,...........		1 25	1 50
Chestnuts, per bushel,..........		none.	
Walnuts,	per barrel,........	none.	
	per bushel,........		
Almonds, per pound,............		12	14
Filberts, per pound,............		4	6
Castana, per pound,............		4	6

Remarks. The weather since our last, has been rather cold and dry; one or two frosty nights have occurred, which, however, has done no damage to crops in the immediate vicinity; but at some distance north and west, the cold was quite severe for the season, and the fruit is stated to have been much injured. Crops, with the exception of corn, look extremely well in our vicinity, and a good fall and winter supply may be now anticipated. Apples and pears promise abundant crops.

The supply of Potatoes is sufficiently abundant to last till the new crop comes to hand, which will be, probably, in the course of a fortnight; sales are now dull, and prices low. The last year's stock of Turnips, is all gone; but the new crop comes in fine, large, and cheap. New Beets are also fine; a bunch consists of four roots. Asparagus is yet to be had, but peas being now plenty, it is not much sought after. A few Early York Cabbages were brought in this week and readily sold at quotations; they are not yet plenty. Rhubarb is abundant and good. Peas are now brought in from the vicinity, and sell at moderate prices; the price, however, is very fluctuating, which is owing to the great demand on some days, and the few wanted on others. We have seen no squashes the past week, except the West India, which still remain at former quotations.

The stock of Apples is nearly exhausted; no Baldwins, Pearmains or Pippins can be found; Russetts are the only kind to be obtained, and few of them remain on hand. Strawberries are fine this year, but not very large, owing to the prevalent dry weather; a few Keen's seedlings and Methvens, of prime quality, have commanded a good price; we are glad to see the finer varieties now cultivated in the place of the old Wood. A few Cherries were brought in this week. Green Gooseberries and Currants, the former abundant, are selling at quotations. Pine Apples are plenty, several thousand having arrived since our last, and of good quality. Oranges have advanced considerably; and few remain in first hands. Lemons have, also, advanced a shade; some new arrivals are expected.

Boston, June 20th, 1835. M. T.

Art. V. *Massachusetts Horticultural Society.*

Saturday, May 23d.—Exhibited.—A bouquet of flowers—Iris, Primroses, Tulips, Roses, Hyacinths and Carnations, from Mr. Wm. Davis, Roxbury; Double Eschschóltzia, from M. P. Wilder, Esq.; Pyrus japónica; Tulips, Geraniums, Roses, Pyrèthreum parthènium, Antirrhínum majus, &c., from T. Mason, Charlestown.

From Messrs. Hovey—Fine specimens of Hyacinth, Tropæolum màjus atro-sanguineum, Double Annual Chrysanthemums, and seedling Polyanthus.

May 30th.—Exhibited.—Lychnis flos jovis, Cynoglóssum pictum, Valeriàna (sp.) Allyssum saxátile, Saxifràga granulàta, Dodecàtheon gigántea, Phloxes, Tulips and named seedling Violas or Pansies, from S. Walker. Cèreus speciosus, (a plant with upwards of fifty flowers expanded,) and Tulips, from the Hon. John Lowell. Double flowering Apples, from E. M. Richards. Tulips from L. Josselyn, Esq. Tulips and Anemones, from T. Mason. Fine named Tulips, from Messrs. Hovey.

Asparagus from S. Pond; this was very fine.

June 6th.—Exhibited.—Pæónia moután papaveràcea, P. moután var. Bánksia, P. officinàlis álbicans, and ròsea, P. paradòxica, and arietína, Double white and pink Hawthorns, Azálea nudiflòra, and several other varieties, from J. Kenrick, Newton. Pæónia officinàlis álbicans, P. Carolínea, and P. moután var. Bánksia, Magnòlia tripétela, Iris germánica, Azàlea nudiflòra, Calycánthus flórida, Papàver orientàlis, Phloxes, Double Rockets, Lilacs, Scotch Roses, &c., from the Botanic Garden, by Wm. Carter. A fine variety of Ranunculuses, from T. Mason; Nèrium spléndens, Ruéllia formòsa, Lupínus polyphyllus, Iris germánica, Verbèna chamædrifòlia, Jasmins, Roses, Lilacs, &c. &c. From J. Morton, Double Tulips and Double flowering Cherries.

Petùnia phœnícea, and twenty-five varieties of Geraniums, from Hovey & Co.; twenty varieties of Geraniums, from S. Sweetser. Double White Rocket, Saxifraga, Valeriana, Iris, Pæónia albiflòra var. Whittlejii, and frágrans, Verónica gentianöides, Ranunculus, Columbines, Lychnis, Cynoglóssum pictum, Phloxes, Lilacs, persian and white, and named seedling Pansies, viz.:—Daniel Webster, Mary Queen of Scots, Carter's Prince of Orange, William Wirt, Walker's gigantic. Maiden's Blush, and others, from S. Walker.

Fine asparagus from S. Pond.

June 10th.—Exhibited.—Twenty-five varieties of Geraniums, from S. Sweetser. Hespèris matronàlis fl. pl. álba, Iris sibèrica of various colors, Spiræa filipéndula, Robínia híspida Saxifraga, Phloxes, Scotch Roses, &c., a Prize Pink imported as No. 5; exceedingly fine, from S. Walker. Fine Ranunculuses, from James Kavenaugh, Cambridge. Pæonies, Lilacs, Syringias, Scotch Roses, Phloxes, &c., from Wm. Kenrick. Papáver orientàlis, from A. Atkinson, Esq., Brookline.

From J. Kenrick—Pæónia paradóxica, paradóxica fimbriàta, P. officinàlis ròsea, and P. albiflòra rubéscens; Azàlea calendulàcea, incarnàta, and other varieties; new Rose Acacia, Aristolòchia Sipho, Roses, Yellow and Scotch, Dutchess of Gloucester, Ferox and Irene; Double White Hawthorn; Scarlet Trumpet, White Italian, Early Dutch, and Douglass's new Honeysuckle.

A great variety of flòwers from Messrs. Winship.

Roses, Pinks, &c., from S. Pond,

Strawberries from J. L. L. F. Warren, Brighton; from R. Ward, Roxbury; and from Joseph Warren, Brighton.

June 20th.—*Exhibited.*—Papàver orientàlis, Bártsia coccinea, Lupinus polyphyllus, and Pæónia albiflòra var. Whittlejii, from M. P. Wilder, Esq. A Dahlia flower from R. Rogerson, Esq. From the Hon. John Lowell—elegant specimens of Cáctus speciosissimus, Alstrœmèria pelegrina, Márica cærùlea, and Curcùma Zerúmbet, Sarracèna purpùrea, Vibúrnum dentàta, Arum tryphyllum, Aràlia nudicaúlis, Arethúsa bulbòsa, and Córnus paniculàta, wild species, gathered in Duxbury, from E. Weston, Jr. Esq. Pinks, Roses, &c., from S. Pond.

Azàlias, Roses, Lychnis flos jovis, Fraxinélla, Pæònies, and Honeysuckles of several kinds, from J. Kenrick. Delphinium sinénsis, Campánula médium, Spiræa filipéndula, Phloxes, Pæonies, Roses, Honeysuckles, &c., from W. Kenrick. Red, white, and pompone moss and other Roses; Pæonies, Phloxes, Astrántia màjor, Penstemons, Fraxinélla, Delphinium sinénsis and other flowers, from Messrs. Winship.

From S. Walker—Ranunculuses, Roses, Phloxes, Double white and purple Rockets, Delphinium sinénsis, Lysimàchia, Nigélla damascèna, Spiræa filipéndula, and superb specimens of laced pinks. Petùnia phœnicea, Gailláirdia aristàta, Calceolària péndula, hybrida and picta, and Pansies, from Hovey & Co.

Fine Keen's seedling Strawberries, from T. Hastings; Mulberry, from S. Pond; Early Virginia and fine Keen's seedlings, from E. Vose, Esq.; Róyal Scarlet, from J. L. L. F. Warren.

ART. VI. *Essex County Natural History Society.*

This society held its annual meeting, for the choice of officers, in Salem on Wednesday the 16th inst. The first show of flowers for the season took place on Friday the 19th.

Exhibited.—Large species of Pæónia albiflòra var. Whittlejii, multiflòra Rose and Bouquet of flowers, from Mrs. Wm. Dean. Amaryllis formosissima and bouquets, from Mrs. J. Holman. Multiflora and other Roses, from Mrs. J. W. Treadwell. From A. Houghton, Lynn, a variety of Geraniums and green-house plants, and Bouquets of Pinks and Roses. Pæónia albiflòra var. Humeii and Whittlejii, and other flowers, from Charles Lawrence. Pæónia albiflòra var. Whittlejii, Geraniums and Bouquets, from Francis Putnam. From J. S. Cabot—Pæónia albiflòra var. sibèrica, laced pinks, Double White Rocket, Lupinus polyphyllus var. álba, and other flowers. A new variety of Malope, the seed from China, Pinks, Larkspur, and Phloxes, from J. C. Lee; bouquets from T. Prince; single pheasant-eye, and other Pinks from J. M. Ives; variety of seedling Pinks from H. Wheatland; Pink from W. Micklefield.

Native plants.—From George Osgood, Danvers—Vaccinium vitis-idæa. Wm. P. Richardson—Diervilla canadénsis, Nymphæa odoràta, Kàlmia angustifòlia and latifòlia, Arethùsa bulbòsa and Ophioglossöides.

There were two English Goldfinches exhibited by Mr. W. R. L. Ward, which attracted considerable attention, from the ingenuity they displayed in drawing up an inclined plane a miniature wagon containing their food, and by raising a bucket from the well beneath.—*Salem Observer.*

Art. VII. *Maryland Horticultural Society.*

Saturday, May 30.—*Exhibited.*—Early York Cabbages, by Edward Doran; a dwarf Cherry Tree, with ripe fruit, by Henry Schroeden; Hermánia incisa, R. A. Taylor; forty varieties of Roses, among which were the R. Harrisònia (a splendid seedling of a fine gamboge yellow) and Henry Clay; gigàntea, white multiflòra, sarmentosa, and other fine varieties, Pelargoniums, Pansies, Mimulus Smíthii, &c., by Samuel Feast; forty varieties of Pelargònium, Ròsa Smíthii or yellow noisette, four varieties of Azalea, Allium mollis, Rhododéndron pónticum, Justicias, &c., by John Feast; Cyprípèdium parviflòrum and flàvum, from G. B. Smith.

Art. VIII. *Meteorological Notices.*

FOR MAY.

The month of May was rather cold; the highest range of the Thermometer being but 83° and this for only one day. May was, also, accompanied with two or three thunder showers, and the first part of the month with four or five rainy days; the latter part was very dry: prevailing winds S. to E. Considerable frost was seen to the north and east, on two or three mornings.

Thermometer.—Mean temperature 54° 20. Highest 83°—Lowest 32° above Zero.

Winds.—N. one day—N. E. two—E. eleven—S. E. three—S. five—S. W. three—W. four—N. W. two days.

Character of the Weather. Fine thirteen days—Fair seven days—Cloudy eleven days.

Rainy five days—*Showery* two.

MONTHLY CALENDAR

OF

HORTICULTURE AND FLORICULTURE,

FOR JULY.

FRUIT DEPARTMENT.

Grape Vines in the green house or grapery will by this month have made very strong shoots, and the fruit of those in bearing will be about the size of peas. Shorten the lateral or bearing branches to within two eyes of the fruit; thin out the berries, using a small sharp-pointed pair of scissors for the operation. In thinning, the small and inner berries should be taken out, as the form of the bunch should be left entire. Syringe every other day, and if there is any appearance of mildew, it should be kept down by a profuse use of sulphur water. Those from eyes, in pots, where wished to bear next season, should be shifted in the largest size, and kept well watered with liquid manure, pp. 47, 94, &c.

Grapes in the open air should have their fruit bearing shoots topped within two eyes of the fruit; the wood should also be kept thin, and not be allowed to run together; if mildew appears, syringe well with sulphur water or with *pure* water; we have found the latter to prevent its increase, when used plentifully, pp. 7, 128, &c.

FLOWER DEPARTMENT.

Annual flower seeds now sown, will flower beautifully during the month of September, and if no frosts, through October. The coreopsis, candy-tuft and others, if several successive sowings are made, will continue in bloom until frosts; but if only one sowing is made in the spring, the plants will flower this month, and produce few blossoms after.

Biennial seeds of various kinds may still be sown; they will make good plants for flowering another season.

Carnations and Pinks should be layed this month.

Dahlias, as they proceed in growth, should be tied to stakes, and if dry weather, well watered, p. 130, 172.

Rose Cuttings may still be put in.

Geraniums. Cuttings should be put in this month, p. 249.

Tulips, *Hyacinths*, and other bulbs, should be taken up and laid away in a dry place until wanted for planting in October.

Roses. This is the month for budding roses, although they will do well in the early part of August, p. 217.

Pansies may now be layed or propagated from cuttings, p. 17.

Chrysanthemum cuttings should be topped, p. 138.

VEGETABLE DEPARTMENT.

Asparagus beds should be kept clear of weeds.

Early peas may now be sown for a late crop.

Cucumber plants in hot beds, will have nearly exhausted themselves in bearing; as soon as the vines in the open air fruit plentifully, the vines can be pulled up, and the frames used for other purposes.

THE AMERICAN GARDENER'S MAGAZINE.

AUGUST, 1835.

ORIGINAL COMMUNICATIONS.

Art. I. *Notices of some of the Gardens and Nurseries in the Neighborhood of New York and Philadelphia; taken from Memoranda made in the Month of March last.* By C. M. H.

(*Continued from page* 246.)

The establishment of Mr. G. C. Thorburn, seedsman and florist, in Liberty street, (formerly the property of our excellent correspondent, now of Hallet's Cove), demands mention for its judicious and tasteful arrangement, and for the fine variety of plants it contains. Although not so much attention may be given to their growth, as in nurseries where the cultivation of plants is the sole business of the proprietor, still, they have the appearance of strength and health, and well fitted for exportation to various parts of the country.

It is now upwards of thirty years since our correspondent, Grant Thorburn, Esq. first commenced the business of a seedsman in New York. After a series of years of toil and labor, in endeavoring to establish himself and his business, in the confidence of the public, he was subjected to the great loss of nearly all his property, which was destroyed by fire. A few years afterwards he was also nearly ruined by his attempting to raise seeds, which could not be imported, in consequence of the late war. This expensive method of procuring seeds in this country, with the little knowledge of their growth at that time, could not otherwise than prove an unprofitable and fruitless attempt; he however again resumed his former business, and by the help of friends was enabled to establish the foundation of what the establishment now is.

Mr. Thorburn's sons were a few years since, connected with him in the business; one of them left, and it was carried on by himself and eldest son. Mr. Thorburn has lately retired from the business altogether, and given it up to his son, Mr. G. C. Thorburn, who now conducts the whole.

We have been thus particular in mentioning these facts, although they may be already well known to most of our readers, for many reasons; the first of which is, that we cannot but think the establishment of such a place, in the very centre of so large and populous a city as New York, and at a time when gardening was little known, has been of exceedingly great importance in spreading, and much more extensively diffusing, a general taste for Floricultural pursuits. The nursery of the Messrs. Prince, on Long Island, and of others in Philadelphia, date their origin at a much earlier day, but they are not situated where the public could have that easy access to them, that they have had at this place. We have no hesitation in saying, that this establishment has tended as much toward the dissemination of a taste for gardening pursuits, as any nursery or garden in our country. Who has not noticed Lawrie Todd, as our correspondent still styles himself, in the various papers and periodicals of which he is a frequent contributor? Who has not listened to his oft told story of his first landing upon the shores of our country—of his future success—of his great, if it cannot be called lucky, success in acquiring a competent fortune; few indeed there are, especially those interested in Horticulture, who have visited, or passed through New York, who have not availed themselves of the opportunity of walking through the establishment of the Messrs. Thorburn.

This place, as most of our readers are probably aware, has lately been sold for an immense sum of money, realizing almost a fortune to its former owner. It is soon to be razed to the ground, and the place, which has long been the resort of the Horticulturist and the Florist—where for many years the gorgeous tulip has arrayed itself, and the hyacinth given out its fragrant odor, where the dahlia, the pride of the autumn, has reared its magnificent head, and where even winter appeared with not half its rigors, by the continuous bloom of the snowy white Camellia, through the dreary weather,—is to be built up with blocks of stores or dwellings. The value of land in New York, will soon cause every garden, as it has nearly already, to be removed without the city.

In the green-house we did not find many flowers in bloom; here, as well as at Mr. Hogg's, an immense number of bouquets of flowers are cut throughout the winter, and more particularly in the months of February and March. We saw, however, in flower, Amaryllis formosíssima and some other species. Caméllia japónica, *var.* imbricàta, was splendidly in flower: we believe this was the only place where we observed it in bloom during our visit. It has since flowered at Col. Perkins' in Brookline, and also in our garden. It is one of the finest of Caméllias; it is figured in Chandler's illustrations of the Caméllia, and in the Botanical Register; in the former, the flower is represented of a deep crimson color, and is stated as occasionally being striped with white; in the latter, it is striped or edged with white, exactly the same as the three different plants which we have had the opportunity of seeing. It is rather singular that it should have been described as being of a deep crimson color: the plant at Col. Perkins' had several flowers upon it, all of which were nearly alike. Here was also fine large plants of C. variegàta, C. incarnàta, and others with several flowers expanded. Mr. Thorburn's stock of Caméllias is large, and contains a fine variety; we noticed among the rest, Colvillii, reticulàta, exímia, &c. Here was some fine plants of Magnòlia grandiflòra raised from seed; Pandànus (sp?) and large American Aloes. Mr. Thorburn, senior, when he was last in England, brought home several vases, which in March last, ornamented the green-house. Two plants of Ardísia coloràta, were growing in two of them; the largest plant of the India Rubber tree (Ficus elástica) we have ever seen, was growing at this place. It is a most admirable plant, and few are aware of its great beauty when plunged out in the border, or if large plants, placed in vases, and set upon the lawn, or among the shrubbery of the flower garden; its large, strong, thick, fleshy and deep-green leaves, have a noble appearance; it is also a fine ornament to the green-house or conservatory. Pæónia moután, *var.* Bánksia, was in flower, with several blossoms expanded; several pots of lachenalias, and hyacinths were in full bloom. We here observed several plants, of a species of beet, which are grown for the beauty of their leaves and footstalks, some of which are of a bright yellow, and others of a deep crimson. Many other plants we noted down, but as they were not in flower, our enumeration of them would not be of interest to our readers. We have lately understood that Mr. G. C. Thorburn intends removing early in the fall; to what place we are not informed.

Nursery of Messrs. Shaw & Thorburn, Hallet's Cove, Long Island. This nursery has been established within a few years. It is about twenty acres in extent, and situated near the landing of the ferry at Hell-Gate; the distance, we believe, of about five or six miles from the city. It was first established under the direction of Mr. John Thorburn, who erected a large and extensive green-house, and also one or two smaller ones, for the forcing of flowers for the purpose of cutting bouquets during winter, with which he supplied (and still continues to) his brother in New York. About a year since, Mr. Shaw, formerly of the old Botanic Garden, was taken in a partner, and the business is now conducted in their name.

Their collection of plants is quite large, and embraces many fine and choice kinds. In Camẽllias and Geraniums they are very rich; they have, also, a fine collection of Amaryllises, including many of the seedlings raised at Colvills'. Among the Camẽllias we saw in flower, varieties flórida, coccínea (Alnuts splendens), variegàta, Wóodsii, incarnàta álba pléna, compácta, anemoneflòra álba, and a kind supposed concínna; the latter was extremely beautiful; but the label having been lost, or accidentally exchanged, it was misnamed. There was here a good stock of Rhododendrons and Azaleas of the newer kinds, including the R. áltaclérence, Mortèrii, Russelliànum, &c. The green-house is divided by a glass partition, and one part is kept at a considerable higher temperature than the other, answering the purpose of a hot-house or stove. In this we observed that curious and singularly beautiful plant the Canary bird flower, (Tropæolum peregrínum) covered with its copious wreaths of flowers; this plant, like many other twiners or climbers, is remarkable for the footstalks of its leaves answering the purpose of tendrils; it quickly attaches itself to anything in its way, and often attains to a great height: we should think that this plant extended several feet, and had open several hundred flowers. We mentioned this plant not long since (204) as being in bloom in Mr. R. Buist's, Philadelphia. We then gave it the specific name of pentaphyllum, with some observations on a new genus, &c. We wrote from memory without any reference, and inadvertently fell into this error: it will be found corrected in the present number, in our notices of new plants. We again state that it is easily propagated from cuttings or seeds, and that it is deserving a place in every green-house. Among the Amaryllises we observed in flower Johnsònia, venústa, and several other equally beautiful kinds. Here was a good stock of the Cácti, and we noticed a plant of C. Mallisòni, a splendid new hybrid. We observed many other fine things in the stove compartment, but want of time prevented our making a memorandum of them.

In a small pit or green-house adjoining the larger one, we observed a large number of roses, and flowers in bloom, for cuttings for bouquets. In this was placed several Camẽllias which had been budded the preceding fall, and had taken well. The method of budding was different from that in general use: the bud is prepared by taking off a piece of the bark with the bud attached, cutting it exactly of the same size as the piece taken out of the stock, in order that the edges may meet as close as possible. The size of the bud will vary according to the strength of the wood; but in general it should be about half or five eights of an inch in length, and one or two eighths in breadth: the whole should be covered with grafting wax, as bass matting alone will not keep the air from the bud. This method answers very well for increasing the Caméllia, the wood of which is so hard, that the old method of inserting the bud under the bark, cannot be performed with much certainty. We here observed Erìca báccans, with its elegant tufted heads of rosy-colored flowers, in full bloom; the common Kérria japònica was flowering, trained to the back wall. Lupinus mutábilis, that new splendid annual, was throwing up spikes of flowers; the plants were taken from the flower border, and placed in pots, early in the fall, our summers being scarcely long enough for it to open its flower buds in the open air: its changeable flowers are extremely showy. There was also here a fine stock of that gem of the garden we have so frequently noticed, the Petùnia phœnicea. Messrs. Shaw & Thorburn's gardener appeared very industrious and well informed, and the plants under his care looked exceedingly well.

Linnæan Botanic Garden and Nursery, Long Island—William Prince & Sons, Proprietors. This extensively known establishment, though the last named in our remarks, will not by any means be considered the least in its character. It is one of the oldest nurseries in the country, and also one of the most extensive, if not the very largest. It was established by the father of one of the present proprietors, and has become a family inheritance. When we take into consideration all that has been said in regard to this place, either by the proprietors themselves, or by the persons who have frequently visited it, among whom have been some very intelligent and able gardeners, who have visited this country, we feel ourselves almost incompetent to speak of the establishment, for fear that in our impartiality we might not be thought to do justice, by the proprietors, or be said to give too much praise by others. Much has been written in relation to it in Loudon's Magazine; and for a time, several communications appeared under various signatures, in regard to its extent and the variety of plants it contained.

We stated, when we commenced our remarks, that we should confine them chiefly to the appearance of plants in the green-houses, hot-houses, &c. We shall not at this time say anything as regards the extent of this nursery, the variety of hardy plants it contains, or of its immense number of correspondents, agents, &c. We hope at another opportunity to do this, and to do it with justice and candor; we passed an hour or two in walking through it in the fall of 1831, but it is, we have understood, much improved since then; we know that the Messrs. Prince are too liberal, not to give every indulgence for our statements. Mr. W. R. Prince informed us, the past spring, that as soon as circumstances would permit, he intended visiting England, and the Continent, partly with a view of becoming more acquainted with Horticulture, and for the purpose of noticing the extent and variety of plants contained in their gardens and nurseries. He kindly promised to contribute to our pages, and our readers will, we have no doubt, be gratified with his remarks. The Messrs. Prince have lately added to their business as nurserymen, that of the seedsman, and are dealing largely in seeds.

The extent of glass, including the conservatory, green-houses, hot-house, frames, &c., we should judge to be upwards of four hundred feet in length. One of the houses in which are kept the Orange and Lemon trees, is built in the old style, with large upright front sashes, and a dark roof. The collection of Oranges and Lemons is very large, and includes many more distinct varieties, than any other we have ever observed; in their catalogue they enumerate upwards of seventy kinds; they are well grown, and many of them beautiful shaped plants. We saw an immense number of seedlings intended for stocks, to bud, or inarch upon. Messrs. Prince have been at great expense to procure from the Italian nurseries, which excel in this grand fruit, nearly all that are worthy of cultivation. Here we also noticed a fine stock of the different varieties of the Magnolia, of which there is a large number of kinds, including the M. Soulangiàna. Hundreds of plants of the Gardènia flórida and G. rádicans; of the different species and varieties of Myrtles, a good stock.

It cannot be expected that in an extensive establishment like this, there would be many flowers in bloom. In the green-house, however, which adjoins the orangery, we saw one of the finest specimens of Acàcia verticillàta, profusely covered with its showy blossoms; Metrosidèros lanceolàta, and some species of Banksia, of which there were many plants, were also in flower; that much sought after plant the Epàcris grandiflòra, with its exquisite tubulous, rosy white blossoms, was in full bloom. Here was a fine collection of geraniums and a good variety of Ericas, though small plants. In the hot-house which adjoins the green-house, and completes one range, we noticed several beautiful ferns. A good stock of that magnificent bulb, the Crinum amábile; some Kæmpferias, Dracænas, &c., young plants of the Banana (Mùsa sapiéntum), several species of the Càcti. In the

Camèllia house, not more than five or six plants were in flower; among them, however, was the C. althæflòra, with several blossoms expanded; it is a brilliant kind, raised by the Messrs. Chandler, about the same time of the corallìna, with which it is nearly equal in beauty; the others were the common varieties. The stock of Camèllias is probably the largest in the country, and includes the most rare. The reason why more Camèllias were not in flower, was from the cause, that the shutters on the glass were not taken off for several days together, and the house kept as cool as possible, without endangering frost.

From the Camèllia house, we entered another green-house filled with a variety of plants; Myrtles, Eugenias, Azaleas and a good stock of other kinds, which we do not recollect the names of. A few Camèllias which were placed here were in bloom, among which was the C. Woodsii, maliflòra and others; several species of Brùnia were prettily in flower. We were particularly struck by observing the very large number of some kinds of plants which the Messrs. Prince have in their collection, and we could enumerate many varieties; but they would not perhaps interest our readers, as most of them may be found in their catalogue.

In the frames, of which there were several, we found a good stock of Chinese roses, seedling magnolias, rhododendrons, and other plants. There was also a number of hardy shrubs and plants, which were laid in for executing orders to the south during winter, when they could not be taken from the open ground. When we visited this place a year before, we think the green-house plants, generally, looked in rather better health than they did the past spring; the gardener was at the former time repotting the whole of the Camèllias, and many other plants which had suffered from the want of it. Mr. Prince, Jr., informed us, upon our mentioning to him this fact, that their former gardener was very intelligent and well acquainted with his profession, but that he had left them; and they had not yet procured another, as they expected one from England. We wonder at the good order which already exists, when we consider the multiplicity of avocations which must ensue, from the nursery and seed business combined.

We have thus completed our remarks, which have extended to a greater length than we at first anticipated, and perhaps farther than has been interesting to all our readers. Some would, probably, have rather read practical communications on the management and growth of plants, or the treatment of some objects of more utility; while others have been gratified in reading the advancement made in Horticulture and Floriculture by their neighbors. The object of a periodical Magazine is not to detail practices already well known, and laid down in works devoted to the subject of which it treats; but, rather to give information of all new discoveries, and to record every improvement which may be found useful and advantageous, to the scientific or practical gardener. These at first, however trifling they may often seem, when fully proved by repeated experiments, and correct observation, result in the foundation of some methods much more valuable, and of more immediate utility, than those previously adopted. The knowledge of gardening, like every other art, can only be advanced to any degree, by calling in the assistance, and bringing to bear upon it those others, which enlighten, and throw some information upon its various branches. We therefore think, that those persons who suppose that mere practical papers are all that should fill the pages of a Magazine, take altogether a narrow and quite unconfined view of the subject; and that they have not yet made that progress in Horticulture, that enables them to see, that its thorough knowledge, and proper application, is only to be obtained by acquiring some information of those sciences, without which it would be a tedious and uninteresting study, rather than one of the most pleasing and agreeable.

These observations are not made on the supposition that any such objections have, or will be heard; but to show how far we think a Magazine should extend its character. As regards the visiting of gardens and nurseries, we cannot here omit to urge upon every amateur, or lover of Horticulture, and more particularly every practical gardener, the importance resulting from such a course; not only should those in the vicinity of their situation be often inspected, but a tour should be made every few years to all those within the middle and northern sections of our country. To be confined to one spot, and to know nothing, but what may be learned from reading of what is done at other places, deprives one of all ambition, or of any desire to excel in his profession. An amateur gardener may imagine that he excels in the cultivation of a certain class of plants, and makes no effort to attain a greater degree of perfection; but when he sees that another equals, his ambition is touched, and he is stimulated to greater exertion. It is from seeing and comparing, that we know our faults and learn how to improve and correct them.

We now take leave of our readers, with the anticipation, that, if our remarks have proved as interesting as other portions of our original contributions, we shall have the pleasure, at some future time, of giving some information of other establishments, which it would do credit for our country to possess, if it were many more years advanced in the science of Horticulture, or Landscape gardening.

Art. II. *On the Intellectual Education which a Gardener may acquire.* By Grant Thorburn, Esq.

Self-education may be carried to a greater extent by a gardener, than by almost any other artisan; no gardener, in our opinion, ought to be employed as a master, under the age of twenty-five years; suppose him, therefore, to be put an apprentice at fifteen, he has ten years in which to acquire his profession, and generally to improve himself; in that period he may not only acquire his profession, but, according to the extent of his ambition and application, a considerable degree of knowledge on almost every subject. Everything depends on his ambition; without this, he will not even acquire his profession, and at all events, will find no leisure time for any other kind of improvement. When we consider, however, that the labor of a gardener is not severe, and that it is only during the hours of daylight, the time he has for self-improvement is very considerable. It may surprise some when we state, that this time equals (taking the whole year) that employed in study by professional students at Colleges. A gardener, in the shortest day, begins work at eight o'clock, and leaves off at four o'clock; which, allowing two hours for breakfast and dinner, gives six hours of labor; in the longest days, he works only ten hours, and therefore it will not be far from the truth to consider eight hours per day as the average duration of his labor throughout the year. Dividing the twenty-four hours which compose the day in three equal parts, we have eight hours for rest, dressing and undressing; eight for labor and acquiring the practice of gardening; and eight hours for refreshment and study. On comparing this time for study with that which is usually devoted to it by young men at College, not the generality of young men, but even those who attain to eminence, we will find the difference very inconsiderable: the student requires the same time for rest, and at least two hours more for dressing and undressing; for breakfast he requires an hour; dinner and tea, at least three hours; and for exercise, at least two hours; in all, for exercise and refreshment, six hours; which, added to ten of rest and dressing, gives eighteen hours, leaving exactly the same number of hours for study which every gardener has, taking the average of the year. It is true, the eight hours of the gardener are subject to the time employed in eating; but that well may be considered as compensated by the knowledge of Botany which he acquires in the garden, during his hours of labor. Add also, that the gardener may (unless his health forbid) draw still more time than we have mentioned from the hours of sleep; we think it will not be denied, that, taking all circumstances into consideration, he has as much time as studious men, taking the average of the year, usually devote to study.

The source from which he is to derive his knowledge, is chiefly from books; with such aid as opportunity offers from professional men, public lectures, men of talents and learning, whenever he has an opportunity of conversing with them. The sort of books desirable to consult, independent of those connected with his profession, are such as treat on Chemistry, Zoology, Mineralogy, &c.; but that which we are of opinion cannot be dispensed with, is a good Encyclopædia, such as the Encyclopædia Metropolitan, now publishing. How much more pleasant and profitable is it for a young man to spend his evenings, in thus improving his mind, by reading in the great book of Nature, and through it to look up to Nature's God, than to be sitting in a tavern, listening to, or joining in, some stupid harangue about politics, a parcel of stuff that will neither make him wiser in time, nor better for eternity. *Mind your own business*, and if you do well here, you will do well there, and I can say no more, were I to write a whole year.

Yours, GRANT THORBURN.

Hallet's Cove, Long Island, June, 1835.

ART. III. *On the Rose.* BY AN AMATEUR.

Resplendent Rose! to thee we'll sing;
Resplendent Rose! the flower of flowers,
Whose breath perfumes Olympus' bowers;
Whose virgin blush of chastened dye
Enchants so much our mortal eye.

* * * * * *

Rose! thou art the sweetest flower
That ever drank the amber shower;
Rose! thou art the fondest child
Of dimpled spring, the wood nymph wild.

* * * * * *

Oh! whence could such a plant have sprung?

Moore's Anacreon.

WHO can paint this loveliest of all lovely flowers, the queen and pride of all Flora's dominions, the rival of Venus herself? Who can portray its virgin delicacy and modesty—its exquisite blushing tints—its splendor and all-enchanting beauty? and its balmy and heavenly fragrance, what else is there, that will so refresh and invigorate the heart, or delight and animate the senses? It were as well for the poet to attempt to picture the tints of Aurora, when rising in glory in her oriental skies, or for the artist to transfer to canvass the brilliancy and lustre of the sun's glorious rays, as for human language and art to describe a flower that is composed of everything that is graceful, lovely and sweet.

It has been called (and properly too) the emblem of beauty, and the poets of all nations have sung its praises; yet it is still the same favorite as ever, and yet a theme upon which language may exhaust itself, and its beauty increase and its attractions seem greater than ever. As it is one of the most common of all flowers that beautify the little spot before the door of the humble peasant or cottager, as well as ornament the gardens of the rich and great, so it is one of the most fragrant and lovely. We become attached to it in our early days, and we cherish it with almost sacred veneration, to the latest moments of our life. Its uses are almost as various as its varieties. We pluck it to deck the altar of our holy temples; our festive boards are made to glow with its varied hues; Love gathers it to wreath around his votaries; warriors crowned themselves with its profuse garlands; the luxurious strew their dwellings and couches with its leaves; and grief finds a relief in dropping a transient flower upon the tomb of the virtuous and lovely.

It would not perhaps be interesting to most of your readers, to read many of the allusions made to this sweet flower to be found among the oriental poetry; and therefore I prefer giving some account of the origin of its name, its history, uses, &c. The word *Rosa* is derived from *rhos*, signifying red in Armorican. It belongs to the class Icosándria, order Polygínia, of the *Linnæan*, or artificial system, and to the order Rosàceæ, of the *Jussieuean*, or natural arrangement. Different species are to be found growing indigenous in Persia, China, Siberia, Caucasus, Crimea, Barbary, Nèpal, Levant, Austria, South of France, Switzerland, Germany, Hungary, Britain, N. America and Kamtschatca. Botanists are not agreed as to the number of the original species; some say that they are all varieties of the European species; later or modern botanists, however, divide them into species, subspecies, and varieties. There has been several works published on the rose in France and England; the most complete, as regards the scientific arrangement is, the *Rosarum Monographia*, by Dr. Lindley, published in London in 1819: in this, upwards of a hundred species or sub-species, are described, and several figured. The most extensive work, with plates, is that of Redouté and Thory; it is entitled *Les Roses*, and contains folio plates, splendidly and truly colored, of all the known species and varieties of this flower: minor works have also been published, but these two are the most known.

The history of the rose is full of interest to every admirer of the flower. From the days of the prophets, when it was stated in holy writ, that "the desert shall rejoice and blossom as the rose," to the present moment, it has been the theme of poets, philosophers and statesmen; and none have been too great to sing its praises. With this humble flower, is linked the history of the rivalship of the houses of York and Lancaster; and for thirty years, under the different banners of the red and white rose, civil war laid waste and desolate the most beautiful portions of the mother country. Shakspeare says:—

> "And here I prophecy—this brawl to-day
> Grown to this faction, in the temple garden,
> Shall send, between the red rose and the white,
> A thousand souls to death and deadly night."

It was about the time that the two houses were united, in 1485, that a plant of the rose, it was said, was discovered in England, which bore white and red flowers, and which seemed to foretel the union of the parties. It was also said to be, upon the marriage of Henry VII. to Elizabeth, the daughter of Edward IV., that the rose first became known with white and red petals; it is still acknowledged throughout Europe, as the emblem of that happy union, and is known both there and here, by the name of the "York and Lancaster Rose."

In Turkey, the rose is equally admired, and millions of flowers are cultivated in some of the gardens of the Mussulmen; so sacred do they hold this flower, from a belief that it first sprung from the perspiration of Mahomet, that they will not permit a leaf to lay upon the ground, or to be soiled by the tread of the foot. Upon the tombs of all ladies that die unmarried, is sculptured one of these fair flowers. At a feast given by Cleopatra, to Mark Antony, she caused the royal apartments where the entertainment was held, to be covered with the leaves of the rose, to the depth of several inches. But it is related of Nero, that he gave upwards of four millions of sersterces, or nearly one hundred and fifty thousand dollars, for roses, at one supper.

The fragrance of the rose is stated in fable, to have been caused by Love, in the midst of a gay dance at the feast of Olympus, having with his wing overturned a cup of nectar, which, falling on the rose, gave it that exquisitely breathed perfume, for which it will ever stand pre-eminent among flowers. Anacreon writes :—

"And when at length with pale decline
Its florid beauties fade and pine,
Sweet as in youth its balmy breath
Diffuses odors e'en in death !"

"And first of all the Rose; because its breath
Is rich beyond the rest; and when it dies,
It doth bequeath a charm to sweeten death."
Barry Cornwall.

It was a custom among the Romans to bless the Rose; and it is said to be still preserved, and the day dedicated to the purpose, termed *Dominica in rosa.*

In Persia that imaginary "Eden," where the rose is seen in the greatest perfection, a festival is held which is denominated the feast of Roses : it lasts during the time that they remain in flower. This is beautifully described by Moore, in Lalla Rookh; but as these remarks have extended already too far, I leave the history of the Rose with the following exquisite verses by Lord Byron, in which he makes this "flower of flowers" flourish over the tomb of Zuleika.

"A single rose is shedding there
Its lonely lustre meek and pale :
It looks as planted by despair—
So white, so faint,—the slightest gale
Might whirl the leaves on high ;
And yet though storms and blight assail
And hands more rude than wintry sky
May wring it from the stem—in vain—
To-morrow sees it bloom again !
The stalk some spirit gently rears,
And waters with celestial tears :
For well may maids of Helle deem
That this can be no earthly flower,
Which mocks the tempests's withering hour,
And buds unsheltered by a bower ;
Nor droops, though spring refuse the shower,
Nor wooes the summer beam."

To the mere cultivator of plants, such accounts of the history of some of the most beautiful, however so much of interest they may have, will, perhaps, prove tedious, and altogether undeserving a place in a practical work. But will the intelligent gardener look no higher than the mere daily routine of his profession ? will he never strive to know the origin, the history, or the use of the plants he daily, monthly and yearly cultivates ? over which he spends time, and care, anxiety and often, almost painful anticipations ? Will he pass the modest violet, or tread carelessly on its drooping head, without wishing to know aught of its past history? As he walks through his garden, in his leisure hours, surrounded by nature's loveliest works, which he has been years collecting and cultivating, does he desire to have no recollection of the past, no pleasing associations but those that spring from present enjoyment? Certainly he cannot be content without some knowledge of their history. Flowers! there is in the word enough to call forth thousands of reflections.

The cultivation of the rose is generally considered so easy and simple, that it would almost seem superfluous to add any information on the subject; yet, I am aware that there is much to learn as regards their propagation, and somewhat in relation to their successful blooming. But as some of your correspondents have already treated upon the rose, and others may still do so, I propose finishing this communication with some account of the principal species, and the varieties which belong to each.

There are five hardy species, from which nearly all the varieties we have in cultivation have originated. They are Ròsa gállica, R. centifòlia, R. damascèna, R. álba, and R. spinosissima. The Provins or Provence rose of the French catalogues is the R. gállica of the English; it is the R. centifòlia of botanists, and the cabbage rose of our gardens.

R. gállica L. (the common red or officinal rose.) From this species there has been the largest number, and some of the finest varieties raised. They are not generally of so strong a growth as the damascèna and centifòlia, but very profuse flowerers. By budding on the Dog rose, (R. canína) or some other vigorous species, they grow much more luxuriant than on their own roots. This species is a native of the South of Europe, and was introduced into Britain in 1596. The French have been the most successful in raising new varieties, and to them we are indebted for the finest kinds—some of which are Montgolfier, tricolor, beauté incomparable, Barbanègre, Comte Camaldoli, illustrie beaute, cramoise feu grand and Grand Duke of Tuscany.

R. centifòlia, *L.* (Provins, or hundred leaf rose.) The varieties of this species, the *Rose a cent feuilles* of the French, and our cabbage rose, are extremely beautiful and fragrant. They are of stronger and taller growth than the R. gállica. A native of the South of Europe, and introduced to Britain at the same time of the gállica. One of the finest of this species is the old Provins: there are, however, several kinds, the best of which are the Unique or White Provins, Blush Provins, Monstrous Provins, Scarlet Provins and Royal Provins. A few other fine sorts are Vilmorin, Belle Africaine, Hybride de Luxemborg and boule de niege.

The moss rose is supposed to be a variety of the Provins, having acquired its moss-like pubescence accidentally. It is nowhere found growing indigenous, and from its being first observed in the English gardens, is supposed to have been first raised in England. There has been, however, some French writers, among others Redouté, who have claimed it as a native of their clime. Whether it is in reality a native of England or France, is not of great consequence. It is one of the most beautiful of roses, and when seen in the bud, excelling in loveliness, more than imagination could picture. There are nearly twenty varieties. Most of them prefer a cool and rich soil, excepting the white; this, if on its own roots, is often apt to change to a pale blush; none of the moss roses do so well in our climate, on their own roots, as when budded on vigorous stocks. I would therefore recommend budding the varieties on the Ròsa canìna or sweet briar.

Ròsa damascèna Mill, (Damask rose). This species, one of the most common in gardens, is a native of the Levant, and was introduced to Britain as early as 1573. It is powerfully and agreeably fragrant, and is the kind most used for making the *attar*, or essential oil of roses. The varieties are numerous and exceedingly beautiful. Some of the finest are Grand Cels, belle Auguste, Swiss, Quatre seasons, Bonaparte, Rose du Roi, Garnet striped, and York and Lancaster.

There are several varieties of the perpetual rose, most of which are the offspring of the damascèna. When they become better known, they will be the most desirable of the rose family. They bloom throughout the months of September and October, and are as fragrant as their parent, and particularly so in the fall months. Lee's crimson perpetual is well known, as one of the most showy and desirable kinds. A few others are, perpetual Philippe I., pompone four seasons, and King of the perpetuals.

Ròsa álba, L. (single white rose.) A native of the Crimea, and introduced in 1597. It is of strong and taller growth than either of the three former. The varieties are Eliza álba, Celestial, belle aurore, belle Adelaide, Cuisse de nymph, Royal white, &c.

Ròsa spinosíssima L., (Scotch rose). The Scotch rose, the R. pimpinellifòlia of the French, was but very little known beyond its wild state, till within late years. A communication by Mr. Sabine, in the London Horticultural Society's Transactions some time since, gives a history of this rose, and describes several seedling varieties. Since which time, however, hundreds of seedlings have been raised and cultivated: it is stated that not more than twenty-five or thirty are tolerably distinct. They are very desirable for early flowering, and no garden should be without a few of the best varieties. When planted in a clump, the effect of their profuse bloom is peculiarly showy. A seedling raised by Mr. Harrison, of New York, a few years since, is said to be a splendid variety : it is of a brilliant deep yellow, and perfectly double.

There is a class of roses, denominated *hybrids*, having been raised principally between the China rose (R. índica) and the R. gállica. They are exceedingly beautiful, and include among them some of the most splendid Roses known ; one of these is Rivers' George IV. They are most of them hardy enough to live through the cold winters of this climate, without material injury. They are of quick and vigorous growth, and healthy appearance ; and will grow in almost any soil, unfavorable to other roses.

The *Ròsa moschàta*, of which the old double white of our gardens is a variety, and some other hardy species, I should be glad to name, but I must defer it till some other opportunity. The time is now at hand for budding roses, and should your readers improve the opportunity, I hope they will be somewhat assisted with these few observations.

Yours, AN AMATEUR.

Cambridge, July 10*th*, 1835.

ART. IV. *On the Cultivation of the Daphne odora.* By Mr. J. W. RUSSELL, *Superintendent at Mount Auburn.*

GENTLEMEN,

HAVING had frequent solicitations from you and others, to give the results of my practice on the cultivation of the Dáphne índica, frequently called, and perhaps more generally known, by the correct and appropriate name of Dáphne odòra, I cheerfully comply with your request, which, if you think, after a perusal, it is worthy a page in your Magazine, you are welcome to give it an insertion. The season of the year that this delightful plant puts forth its flowers, adds much to its value ; through the months of November and December, it will be found in full bloom in almost every green-house ; indeed, no collection can be called complete, if deficient of the daphne ; and when a few well grown plants are tastefully arranged in different parts of the house, the fine dark green foliage, presents a beautiful contrast with the tufts of small pinkish colored flowers, independent of the delicious fragrance which is exhaled from them, and which is admired by all the visiters who call to see the place. I have seen but very few persons, who had not a decided preference for this flower, over all others in the green-house. There is a variety variegated in the foliage, D. odòra, *var.* striàta, which some cultivators say is much superior in point of flavor, to the original sort; I have grown this variety, and must confess, that I like the old plant equally as well as the new, as I have not been able to perceive, after repeated observations, that the odor was in any degree superior. Nevertheless, it is well worth growing; the flowers have a little darker tinge of color, and also grow somewhat larger than the original species.

I prefer the first or second week in August, for the propagation of the dàphne. If a quantity of plants are desirable, I would recommend the use of a single light cucumber frame; such a frame as is generally preferred by gardeners, for the raising of early cucumber plants in the spring; this is preferable to one of larger dimensions; supposing that there is no crop in the frame at the time, or if there is, it is probable that the frame could be dispensed with; choose a place that is well shaded with trees, or one with a north aspect, either of which, if easy of access, will answer the purpose; having decided upon the location, about a fortnight before you intend putting in the cuttings, make up a slight hot-bed, with oak leaves and stable manure, about twelve or fifteen inches in height, and a few inches larger, in length and breadth, than the frame intended to be used, covering the manure over with soil four inches deep; when this is done, place the frame on the bed, and close it with the sash—and so let it remain, for a day or two; then by giving plenty of air for a week or ten days, it will be ready for the cuttings; I think they callus and strike root much sooner, with the aid of a little bottom heat. The next thing is to procure what is termed the thumb pot; no gardener ought to be without this kind of pots, as they will be found to be of much service in the propagation of a great variety of plants; having the pots at hand, and the compost, which should be formed of one half well decomposed leaf soil, or any other kind of rich vegetable soil, and sand well mixed together, place a piece of broken pot or oyster shell over the hole at the bottom of each pot, for drainage; then fill them up to the rim, and give the whole a gentle watering—the cuttings can now be taken from the old plants and prepared as follows:—take off a few of the lower leaves, and make the cut under the petiole of the leaf or bud, leaving the cuttings not more than three inches in length; when the whole is dressed over, and in readiness, place only *one* in a pot, and about an inch deep; this done, give them a gentle showering with a water-pot, through a fine *rose*, and plunge the pots down to their rims in the soil, that was laid on the top of the hot-bed, for this purpose; to be successful, all that is indispensably necessary is, attention; a little air should be given every day, more especially if it is hot weather, by lifting up the sash an inch or two—taking care to shade them over with a double bass mat, or a wooden *shutter*, which I think is better than the mat, as sometimes a sudden gust of wind will strip the frame of every thing, and by leaving half an hour's hot sun upon the cuttings, they are frequently irrecoverably lost; the time to shade in the morning is, when the sun shines full upon the frame, and to take it off in the afternoon when the sunshine leaves it; but if the frame is placed in a north aspect, very little shading will be necessary. Occasionally, when the cuttings appear to want water, which will be easily known by the soil on the surface of the pots looking dry, give them a showering over their foliage with a fine syringe, which will be found to be much better than pouring water into the pots, for the injury is almost irreparable if the bed becomes too damp.

I prefer this mode of propagating the daphne in single pots; indeed, a great many other kinds of plants do equally well treated in this manner, as the pots can be bought at a trifling expense, and two or three hundred of them take up but very little room; the cuttings receive no check when repotted, which is a material advantage; those that are well rooted by fall, will flower during the winter. There is one item that must not be overlooked, that is, in taking the cuttings from the plant, the operator must be careful to leave a quantity of shoots all over it untouched, in order to have plenty of flowers, observing only to thin out the superfluous wood for propagating. The daphne always starts to grow just below the flowers; and generally, in the latter stage of flowering, the extremities of those growths always produce the flowers the next season, so that it should be borne in mind, that whenever the tops of the shoots are cut off, the flowers go with them. I have rooted upwards of three hundred plants in one season, by following the above method, and I do not remember of having a single failure. As soon as the plants are done flowering, they should be placed in a very airy part of the green-house, so that they may become strong and hardy; if left where they flowered, they are apt to grow too luxuriantly, and become weak unsightly plants, Yours,

J. W. Russell.

Mount Auburn, Cambridge, July 16, 1835.

Art. IV. *On the Cultivation of the Strawberry, with some Account of several of the most esteemed Varieties.* By the Conductors.

The strawberry, though so generally cultivated, is, however, not often seen growing in its greatest perfection. Since the introduction of the fine English kinds into our gardens, more attention has been given to this fruit; and their large size, and beautiful appearance, combined with their excellent growth, prolific bearing, and high flavor, has acquired for them a place among other dessert fruits, which they so eminently deserve. Previous to the introduction of these kinds, almost the only variety cultivated in this vicinity, was that called the old wood; this is still to be seen in our markets, though not in such abundance as formerly. It is very well, if there is plenty of room in a garden, to have a small bed of the latter, as they often last till the other kinds are all gone. But as regards any other qualification, for ourselves, we would never occupy ground for their cultivation, which could be employed, in numerous ways, to a better advantage, and afford much more gratification to the owner. We have not grown this old variety for several years, having been convinced that, as a dessert fruit, they were quite inferior, and if grown for the market, not yielding, in comparison with the new kinds, a crop which would remunerate for the labor of picking.

There are now a large number of varieties enumerated in the nurserymen's catalogues, many of which are synonymous, and several sorts not worth growing; to make a selection from these, and to include such kinds as combine all the best qualities, is, to one unacquainted with them, no easy task; we therefore give a short description of several varieties which we have cultivated, and most of which have been selected by Mr. Thompson, of the London Horticultural Society's garden, as the best, leaving our readers to select from them such as they think the most desirable; they are all excellent, but some superior to others.

The strawberry is a native of our climate, and is to be found growing in its wild state, in the pastures and fields. Mr. Knight considers all the strawberries as varieties of one species; but some botanists have distinguished them as different species.

The varieties were divided into classes, and well described by Mr. Barnet, of the Caledonian Horticultural Society, of Scotland, in the *Hort. Trans.* vol. vi.; but many more kinds have since been added, and, among them some of the most esteemed.

Class I. SCARLET STRAWBERRIES.

Old Scarlet. Early Virginia, early scarlet, scarlet, and Morissiana scarlet, of our gardens : ecarlate de Virginie, of the French. This is a very excellent high flavored strawberry : it is the earliest of all the varieties, though rather a shy bearer ; the fruit is middle sized, rather globular, of a very light scarlet color; seeds deeply imbedded, flesh pale. We have grown this kind, and no garden should be without it ; it is perfectly hardy, and stands the winter without any protection. It is full ten days earlier than any other kind.

Grove End Scarlet, Atkinson's scarlet, and Wilmot's early scarlet, of the catalogues. Fruit round, hemispherical, brilliant scarlet, flesh pale, and good flavor. This variety is stated as a "first rate strawberry" in some works we have seen. We have cultivated it for two or three years, but have never produced any thing very superior. It is a good bearer, and the fruit of fine flavor, but not very large in size ; we do not think it equal to the following.

Royal Scarlet. This name we do not find in the English works, or in the catalogues of nurserymen, except the Messrs. Prince of Long Island. What its true name is, we are not aware ; we first received it from Mr. Haggerston, when he carried on the vineyard at Charlestown, under the above title. The fruit is of large size, roundish, and of a bright scarlet color ; seeds slightly imbedded ; flavor rich ; flesh pale scarlet ; ripens next to the early Virginia. The foliage is strong, and the fruit on rather long footstalks; stands the winter well without protection. This variety may be the American scarlet, as described by Mr. Thompson, in Loudon's Encyclopedia of Gardening, new edition.

Methven Scarlet, Methven castle (and Methuen scarlet as often mispelt in some publications where it has been noticed.) This strawberry, though not highly prized in England, is in our climate a very valuable kind, and deserving of cultivation in every garden, where a good collection is wanted. It is a very hardy variety, and stands our winters, generally, without the least protection. It is also an abundant bearer. The fruit is very large, round, often coxcomb shaped, especially the first berries, and of a bright scarlet ; flesh pale scarlet, not very firm ; flavor good, but not so rich as the previous named ones; its size and productiveness is, perhaps, its greatest recommendation ; yet it makes a fine appearance, is easily grown, and being much better than some kinds, we esteem it a desirable variety. We have grown it, measuring over six inches in circumference, and weighing upwards of half an ounce. The other fine scarlets are the

Roseberry, black Roseberry, Garnestone scarlet, and Coul late scarlet. We have not cultivated either of these.

Class II. Black Strawberries.

The flavor of all this class is very rich, and highly perfumed.

Downton, Knight's seeding of some catalogues. The fruit of this variety is very large, generally ovate, but the first and largest berries often assuming a coxcomb shape; the flesh is firm, with a rich, juicy, and high flavor; a good bearer, and ripens late. This is a much esseemed sort, and when grown to perfection, one of the largest and very best. The finest specimens we have ever seen, were cultivated in the garden of the Hon. E. Vose, of Dorchester, who informed us, that he had not failed of having a good crop every season.

Elton Seedling. This variety was lately raised by Mr. Knight. The fruit is large, ovate, not filled out at the end of the berry, often coxcomb shaped, and of a shining dark red; flesh a fine red, firm, juicy, with a sharp, rich, agreeable flavor: it ripens the latest of all the strawberries we have ever cultivated; and the fruit must be allowed to remain on the vines, till it becomes very dark colored, or it is very inferior, from its acidity. The fruit grows on long footstalks, which often appear above the foliage; it will be extensively cultivated when it becomes known.

Class III. Pine Strawberries.

Keen's Seedling, Keen's black pine, Keen's new pine, of English catalogues. Fruit very large, round or ovate, sometimes of a coxcomb shape in the largest berries, of a dark and shining red next the sun; seeds rather prominent on the surface; flesh scarlet, firm, with a rich and high flavored juice; a most abundant bearer, ripening about the middle season of strawberries. It possesses all the good qualities of this fruit; but the vines are tender, and easily winter killed, and should always be protected during frost; although it is, or has been, extensively cultivated, yet we have never seen but a very few good specimens. It was first introduced to this country by Mr. Haggerston, about seven years since, and has subsequently found its way into most all our gardens. We have read in the English Magazines, accounts of exhibitions where this kind was presented, of such large size, that it took only *fourteen* to weigh a pound. The largest we have ever seen here, it would have required at least thirty to the pound. It is a most excellent strawberry for forcing; it does not succeed well in rich light soil, but seems to prefer a stiff, rich loam. We have never succeeded in growing it to our satisfaction.

Mulberry, Pine, Cherokee, King, and Mahone, of some collections: fruit of medium size, ovate, conical, with a short neck, of a dark dull red; flesh red, juicy, and of an agreeable sub-acid flavor; a most abundant bearer. This is another strawberry of which we do not find any account in the English works; it is extensively cultivated around Boston for the market, for which purpose it is a fine kind. It is perfectly hardy, more so than, perhaps, any other; it ripens about the time, or just after the Royal scarlet. It is said to be a native of New York; and was first grown in this vicinity, in the garden of the late Gov. Gore, who received it from Mr. King of New York.

Southborough Seedling: fruit large, ovate, conical, of a deep shining red color; flesh firm, juicy, with an agreeable flavor: this is a fine strawberry, but not an abundant bearer. The foliage is strong and vigorous, and fruit on long footstalks. We would recommend it for its size, fine shape, and good flavor; indeed, we do not know a strawberry which has a richer appearance on the table.

Class IV. CHILE STRAWBERRIES.

Wilmot's Superb: fruit very large, round or rather ovate shaped, sometimes compressed, of a pale, shining scarlet color; seeds prominent; flesh pale red, with a woolly centre; flavor good, but not rich; except in its size, we would recommend any of the others we have described.

Class V. HAUTBOIS, (*Fragària elàtior.*)

Prolific or conical Hautbois; double bearing, Hudson's Bay, and Musk, of some catalogues; fruit medium size, ovate, conical, of a very dark dull red, inclining to a purple on the sunny side; flesh greenish, firm, not very juicy, but of a highly perfumed flavor. This variety is an abundant bearer; we think the Hautbois strawberry the finest of the whole; they are not, it is true, so large as the pines or scarlet, but have a character peculiarly their own. In this class, there are what are called sterile and fertile plants; the former have long stamens, and should invariably be destroyed, as they produce no fruit. The variety is, however, much more free from making such runners than the others.

Class VI. includes the Fragària vìridis of botanists, the Green strawberry as generally known. These varieties are but little known in our gardens.

Class VII. ALPINE AND WOOD STRAWBERRIES.

These are the red Alpine, white Alpine, red Wood, and white Wood: the red or monthly, in some situations favorable, bears from June to October. The flavor is rich, berries large for this class, but small, compared with the other classes. The red and white Wood are too well known to need any description.

There are several new kinds of strawberries lately raised, but which have not yet become cultivated enough to ascertain, fully, their merits; some which are reported as fine, are, Knevett's new pine, Myatt's seedling, and Bishop's orange. We have raised several seedlings ourselves, from cross impregnation, and think that we shall save from a number, two or three varieties, which will prove much more valuable in our climate, than most any of the existing kinds.

Strawberries are cultivated from seed, by runners, and by division of the root; from the former to get new kinds, and the two latter to increase the stock; the bush Alpine can only be increased by division of the root. Strawberries should be grown in an open situation, exposed to the sun, and not shaded by trees; in the former site they grow strong, and bear well; in the latter they run up weak, and produce but little fruit.

Strawberries are cultivated in beds, rows, or in hills; some adopt one, and some the other method, and each have their advocates; we prefer, however, their cultivation in beds. Some writers recommend planting in the fall, and others in the spring; and each have had such good success, as appears from their statements, that it seems immaterial which. We have tried both ways ourselves, but we rather prefer fall planting to the spring, provided it is done previous to, or early in, September; later than that, we would defer till April.

The soil we would recommend for strawberries is a rich, deep loam; this, particularly for *pines* and *scarlets*, we are confident will grow them better than any other; the woods and hautbois prefer a lighter one. The distance at which the former should be set, is recommended at twenty-four inches from row to row, and eighteen inches apart in the rows; we have never adopted this plan, thinking it to be a waste of land; but from repeated trials, we are now convinced, that, like many other of the errors which have crept into our system of gardening, especially the prevalent notion of crowding of plants together, it is a mistaken idea; planted so near together, they soon form one mass of foliage, and the runners rooting so close, the main roots have no chance of receiving any nourishment; the sun cannot penetrate into the soil through the leaves, nor the air have any effect upon the plants; the consequence is, that the vines are weak, the fruit late in ripening, of very small size, without color, and almost tasteless. It may be said, that the runners can be kept cut off, and thus prevent such confusion;

but we say that there is not then sufficient room to hoe and dig between the plants, to gather the fruit without injuring the vines, or to afford sufficient food for the roots. It is only from the established and invariable rule among the English gardeners, of setting their plants at greater distances than we do, that they are enabled to raise fruit that will weigh over an ounce each. Mr. Keen, the nurseryman who raised the famous Keen's seedling, says, in a communication in the Horticultural Society's Transactions of London, that, "these large distances I find necessary, for the trusses of fruit, in my garden ground, are frequently a *foot* long."

About the middle of August, let the piece of ground, where it is intended to set the strawberries, be prepared as follows:—let every thing be cleared from the spot, and the whole raked even ; if it is very rich, it will not need much manure ; but if ordinary garden soil, it should have about three inches of half decomposed cow or horse manure added ; the soil should be eighteen inches or two feet deep, on a good sub-soil. After the manure is spread, the piece should be trenched to the whole depth ; beginning at one end, and finishing at the other : if, however, the bottom soil is of a very inferior quality, it will be best to put the middle spit at the top, and the lower in the middle. The whole should be left to settle a few days, or until about the first of September : it should then have added about two inches of well rotted manure, spread on the ground, and dug in lightly with the spade ; it will then be ready for planting. The beds should be marked out, and the distances of the plants. We recommend the following dimensions, but they can be varied at the option of the cultivator. The beds should contain three rows, and should be six feet in width, and the alleys between each, three feet ; the first row should be set one foot from the edge of the bed, the next two feet from that, and the other corresponding with the first ; the plants to be eighteen inches apart in the rows. Select good strong plants from the nursery bed, with bold buds ; choosing the first runners, nearest the old plant, rather than those at a distance ; if they are well transplanted, they will need no farther care except watering, hoeing, and weeding, until cold weather.

Upon the approach of frost, if the Keen's, they should have a little straw, leaves, or old haulm strewed over them ; if this is done to any of the kinds, the *first* season, they will be benefitted by it. It is not, as every reader is probably aware, the extreme cold that does the damage, but the freezing and thawing, which is continually going on, in the months of February and March ; the great heat of our scorching sun, causing the surface of the ground to thaw, and at night freezing up again, oftentimes throwing the roots completely out of the ground.

The first warm day in April, the beds should be uncovered, as the plants are liable to damp if it remained on ; the weeds should be kept clear from the plants, and as soon as the fruit is set, a little loose straw should be placed between the rows for the trusses of fruit to lie upon, and protect them from the dirt. The runners should be cut off two or three times during the season. When the crop is gathered, the same care should be taken, and all weeds hoed up, and the runners cut; strawberry beds are often ruined by ten or twelve days' neglect. The produce is very good the first season ; the second it is the greatest, and the third moderate ; the fall of the third year they should be destroyed, and new ones made. During spring, before the bloom, and also after the fruit is set, the vines should have frequent and copious waterings. In England, where the soil is always moist, and where there is not, as Cobbett says, sun enough to kill a weed when hoed up, they give their strawberry beds large quantities of water. What should we do in our climate, where, with the exception of one or two showers, although they fall with force enough to dash the fruit completely into the ground, leave the soil as dry in a day or two as ever? It should not escape the mind of the strawberry grower, to give plenty of water.

This is the method we have practised, with the exception of the distances we have recommended, and one or two other particulars ; if it is followed, a good crop can be relied upon. The Hautbois and the Wood varieties, need not be set at so great distances, but judgment must guide in this, as well as in other things. At some future opportunity we shall resume the subject.

ART. V. *Some Remarks on the Propagation and Character of the dark colored Variety of the Nasturtium.* By Mr. WM. LEATHE.

DEAR SIRS,

THE Tropæolum màjus, *var.* àtro-sanguíneum, a truly beautiful and highly ornamental plant, I have now growing and blooming in great perfection in my garden. The first time I observed this variety was in the garden of the Massachusetts Horticultural Society, at Mount Auburn, last season ;

but a short time after this, I also saw it blooming finely in the garden of Messrs. Hovey & Co. of this place. It being something new and choice, I was anxious to procure a plant of it. It is quite easy to propagate from cuttings or layers: the plants that I now have in flower, were raised from cuttings put in last fall; it is very tender and succulent, so much so, that the first slight frosts we have in the fall completely kills the whole plant: this was the case with those grown by Mr. J. W. Russell, at Mount Auburn, last year. They were all killed by the early frosts, before he was able to procure a single ripe seed.

I think this a very superior variety, compared with common garden nasturtium; of which there is both the major and minor, double and single, although I have never seen them double. This new variety is said to have been raised from the seed of the common kind,] but sported from the orange yellow of the parent, to its present dark color. It was remarked, at the time it was first raised, as a singular instance of the sporting of plants: the common màjus, having been cultivated in England both for use and ornament, for nearly two centuries, without any particular variation in the color of the flowers ever having been observed. The great removal from the original color in this variety was therefore considered remarkable. It has been stated that seeds saved from this variety will not be sure to preserve its dark color, but return back to that of its parent; it may be so in some instances, but that it is not so in all, has been fully proved, as in the case of Mr. Russell, who raised his from seed.

It would be a very pretty green-house plant, neatly trained, and placed in an airy situation during winter. The flowers and young leaves are not unfrequently used in Europe for salads; the flowers, also, and particularly of this variety, are used for garnishing dishes, and the green berries of the common sort, for pickles. I hope to see this most beautiful plant more generally known and cultivated. I have been told, by good authority, that it sold in London two years ago, for a guinea a plant.

Yours, &c., Wm. Leathe.

Cambridgeport, *July* 11*th*, 1835.

Mr. Leathe having, in the above communication, alluded to this plant as flowering in the garden of the Messrs. Hovey, we would state, that it is a very beautiful addition to the flower border, the green-house, or the conservatory. Whether it can with certainty be perpetuated by seeds, we are not yet assured. We had at first but one plant, which, with another, were the only two, raised from upwards of twenty seeds, that retained their dark color; the others were the common kind; perhaps the seeds might have been a mixture of sorts, although they were imported under the name of the átro-sanguíneum.—*Conds.*

Art. VI. *Notices of new and beautiful Plants figured in the London Floricultural and Botanical Magazines; with some Account of those which it would be desirable to introduce into our Gardens.*

Edwards's Botanical Register, or Ornamental Flower Garden and Shrubbery. Each number containing eight figures of Plants and Shrubs. In monthly numbers, 4*s.* colored, 3*s.* plain. Edited by John Lindley, Ph. D., F. R. S., L. S., and G. S., Professor of Botany in the University of London.

Curtis's Botanical Magazine, or Flower Garden Displayed, containing eight plates. In monthly numbers, 3*s.* 6*d.* colored, 3*s.* plain. Edited by William Jackson Hooker, L. L. D., F. R. A., and L. S., Regius Professor of Botany in the University of Glasgow.

Class I.

Plants having distinct flowers and sexes.

Sub-class I.

Exogenous or Dicotyledonous Plants, (with two seed leaves or cotyledons.)

Division I. Plants with a polypetalous (many-leaved) corolla.

XXXII. *Ternströmiàceæ.*

Camèllia japónica, Thompson's new varieties of. Three varieties of Camèllia japónica, raised from seed in the nursery of Mr. Thomson, Mile End, have flowered this spring for the first time, and have displayed properties that are likely to place them high in the estimation of lovers of the camèllia. The history of their origin is this; seeds produced in 1827, by the variety termed expánsa, were sown in 1828. From these seed, seven or eight plants arose, which have all flowered, have all proved different varieties, and all possessed of merit sufficient to entitle them to be preserved; but the three alluded to above, have been selected from the rest, as possessed of surpassing characters. Two of these three we saw in flower, and a painting of the flowering specimen of the third, on April 28th, when we noted down the following characteristics of them. The names prefixed to them were determined on at the same time.

Susanna: after Miss Susanna Thomson, a daughter of the late Mr. Thomson. The flowers of this variety assimulate to that of the variety Sweetiàna; and some have thought that it equals or surpasses it in the merit of properties. The petals have a white ground, with pink stripes, in the manner of those of a flower of a carnation, but fewer and fainter: the centre of the flower is pretty well filled with petals. The flowers are produced in plenty.

Martha: after Martha Thomson, now Mrs. Poole: its flower assimulates to Colvíllii. The mode of its formation is somewhat that of the Warratah. The petals have a blush ground and pink stripes; the centre of the flower filled with petals. The flowers are produced in plenty; the foliage is fine.

Wadeiàna: after Mr. Wade, now, and for many years past, propagator in this nursery. Petals of a dead white color; the flowers large, in mode of formation distinct from from either the old double white (álba plèna), or the double fringed white (fimbriàta). The petals are larger, and less compactly disposed; the centre is, notwithstanding, filled. The flowers last long; one had stood twenty one days before it had fallen. The leaves are large, and of an aspect which suggests that this variety's habit of growth is a free one.—*Gard. Mag. for June.*

Seven new hybrid varieties are said to have been raised in the gardens of W. F. Cambell, Esq., M. P., Newhall, Lanarkshire, all of which are said to be splendid.—*Flor. Cab., May.*

REVIEWS.

ART. I. ***Boston Journal of Natural History, Containing Papers and Communications read to the Boston Society of Natural History, and published by their Direction.*** **8vo., Part I., Nos. I. and II. Hilliard, Gray & Co., Boston, 1834, 1835.**

WE received the first number of this Journal some time since, and although we have yet had scarcely time to look it through, we cannot omit the opportunity of giving it a partial notice. The first paper is an address delivered at the opening of the Society's new hall in Tremont street, by F. W. P. Greenwood. The writer gives a retrospective view of the society from its formation in 1830, and an account of several of the objects for which the society was established. It is short, but is, throughout, animated with a desire for the spread of the study of natural history.

The society, from what we learn in the address, appears to be in a very flourishing condition, its members zealous in its interests, and its future prospects bright and cheering. We are gratified to see that it has already made such rapid progress; and we may venture to say, it will one day rank among its members, some the most learned and scientific men in our country. The number is already upwards of two hundred. The Library is rapidly increasing in value, many rare works having been added during the last season. The society have given two courses of lectures, which have been well attended, and they have realized sufficient from the sale of tickets, to fit up and lease the hall which they now occupy. We sincerely hope that it will continue to increase in the number of its members, to gather together information in relation to all the branches of natural history, which come within its province, to publish the results of its scientific investigations, and disseminate that knowledge for which it was first originated.

We have now before us the second number, which we have perused with much satisfaction. We are happy to see that it continues to aid and advance the cause of Natural history, by such valuable and original information.

The first paper of the present number is from Prof. Hitchcock, relating to certain Geological changes now in operation in Massachusetts. It contains some curious facts, which although they must have often come under the cbservation of many, have perhaps never been duly noticed before: such as the existence of sub-marine forests on our coasts; atmospheric action in the gradual decomposition of the hardest minerals; agents in the removal of Boulders; changes which are constantly taking place by the action of the sea, &c. In their perusal we were forcibly struck with the truth of the sentiment, that every circumstance in nature, however apparently trivial *in itself*, may become of vast importance by its proper application, or connexion with others.

A communication on the Flora of Wilmington, N. Carolina, is of much value; the more especially, as we regard all such catalogues peculiarly useful, in determining with precision, the botany of our country.

The article on American species of "Hispa," by Dr. T. W. Harris, will be read with pleasure. The accuracy of his usual observations on the œconomy of insects, and his devotedness to that branch of natural science, are sufficient recommendations. We have had the pleasure, through his kindness, of personally observing some of the habits of these little "leaf miners," and were much delighted and instructed in the study. We would recommend similar pursuits to our florists and horticulturists, confident that thereby, they would receive, not only an inexhaustible fund of gratification, but arrive at results of great importance to their professions. Indeed, Entomology is *too much neglected* by our agriculturists in general. They are yearly deprecating the evils of some new or old enemy in the insect form, but are as ignorant of its œconomy, and consequently of the means of prevention, as if it were impossible to attain such knowledge. To raise a superior vegetable, or to introduce a new variety of some beautiful plant, should not be the extent of a gardener's skill; but he should understand more of nature and her curious productions, in order to meet and subdue, or use appropriate to his advantage, every thing which might affect him under the one or other form.

Another valuable communication, to the American Entomologist, is from the pen of the much lamented Thomas Say. We could wish that the various contributions to science, which have emanated from him, were published in some proper and connected manner, for the benefit of the scientific world. Scattered as they are now throughout so many publications, we fear that they are in a fair way to be lost, unless some kind friend, or admirer of his labors, shall collect them.

The description of a new genus of the "Arachnides," (Latreille) accompanied with a plate; and a chemical analysis of "Chrysocolla" found among some ores brought from Cuba, conclude the number. R.

MISCELLANEOUS INTELLIGENCE.

ART. I. *Foreign Notices.*

ENGLAND.

Floricultural Exhibition.—A grand floricultural exhibition was to be held at the Surrey Zoological gardens on the 15th and 16th of June last; the proprietor of the gardens, Mr. Cross, gives *fifty guineas,* in gold and silver medals, for certain specified green-house and other plants; it seems that the Metropolitan Society of Florists and Amateurs, who held their exhibition in the gardens last season, from some cause, have become dissatisfied, and will not again exhibit there; Mr. Cross has, consequently, had recourse to his own purse, and offers the above medals to any persons who may exhibit. It will have a good effect, as it will make every gardener do his utmost to show the most superior specimens.—*Conds.*

ART. II. *Domestic Notices.*

Mòrus multicaùlis.—We have lately understood, from several gentlemen from Hartford, who are quite interested in the cultivation of the mulberry, and the manufacture of silk, that this species has been so severely destroyed during the past winter, by the intense cold, that it is the intention to give up its cultivation altogether in that vicinity; one individual lost nearly ten thousand trees, root and branch; and about all the plantations which have been made, have shared nearly the same fate. The demand for the old white mulberry, the ensuing year, will be greater than ever.—*Conds.*

Walker's Long Green Cucumber.—This new and fine variety, which we stated in our last as having been raised at Oakley Place, has also been grown by E. W. Bull, Esq. of Hartford, Conn. Some of them measured upwards of twenty-two inches in length. He states to us that is a fine and extremely valuable kind.—*Ib.*

Moss House.—A house of this description has lately been built on the nursery grounds of the Messrs. Winship, Brighton. The whole of it was planned and completed by their late gardener, Mr. Robert Murray. It is quite an ornament in rural scenery, and its execution reflects great credit upon the taste of Mr. Murray. We would attempt some description of it, but our readers may expect a full account from him, before long, accompanied, perhaps, with some cuts, by which others may be easily erected.—*Ib.*

The Maryland Horticultural Society have offered premiums for the next year, (from June 6th, 1835, to the spring exhibition of 1836,) to the amount of nearly two hundred and fifty dollars. In the list we notice three amateur premiums, of *ten dollars* each; the first for the four best bunches of asparagus, 26 stalks each; the second, for the finest half peck of pears; and the third, for the finest and rarest exotic, in bloom, we suppose, though it is not stated. Among the others, are premiums for the best seedling camèllias, geraniums, &c.—*Ib.*

The Indiana State Board of Agriculture have issued a notice, stating that they propose awarding premiums or certificates, as their means permit, for the best essays on the following subjects:—

1st. On the best breeds, and the best method of breeding and rearing horses, cattle, sheep and swine.

2d. Horticulture—particularly the growth and improvemont of fruits.

3d. The culture of the vine, and the manufacture of domestic wines.

4th. The growth of the mulberry, (particularly the new Chinese,) and the production of silk.

5th. The growth of timber and live fences—particularly for stocking the great prairies of the west.

Persons intending to write on the above subjects, must forward their essays before the 20th of January next.—*Ib.*

Floral Fair.—We noticed, a few days since, a proposition, in some of the morning papers, to hold a sort of floral fair, or rather to have a sale of bouquets of flowers every Saturday, throughout the summer months. The place mentioned as the most suitable, was the mall, and the time to be between the hours of six and ten o'clock in the morning; we are happy to see this suggestion, and shall be still more gratified, to see it carried into execution; it will not only be eminently useful in disseminating a more refined taste throughout the community, but will be of what is still greater importance, the cause of extending our sources of happiness and pleasure. Whatever tends to do this, should be encouraged, and if possible, brought about. We have no doubt this can be done, and we hope some person will undertake to go forward with it. It would be an excellent chance for our gardeners to dispose of many of their choicest things. Such fairs are held in various parts of France, and in London, a Bazaar has been opened in the Pantheon, intended only for the sale of flowers.

Botanical Tour.—Information has been received by a late arrival from the Sandwich Islands, of the arrival there of Mr. Nuttall, the botanist, accompanied by a Mr. Townsend of Philadelphia, from the Columbia river. We hope that they will do as much towards enriching our Flora, as has the late unfortunate Douglas. If Mr. Nuttall's researches should be very extensive, we anticipate he will furnish the lovers of natural history and science generally, with some account of his travels. Those who have read his tour through the Arkansas, know how well he is able to make such a work valuable and highly interesting.—*Ib.*

Horticultural Exhibition.—We learn from the Genesee Farmer, that the Domestic Horticultural Society of the western part of New York, held an exhibition at the hotel in Geneva, on Friday, July 3, 1835.

"The ball-room was fitted up for the occasion, and most tastefully decorated by the ladies of the village, with evergreens and flowers, forming in appearance one vast bower, with cages of singing birds concealed among the boughs. A rich and splendid collection of fruits and flowers, together with a display of choice vegetables, were exhibited on the occasion. The meeting was numerously attended by an assemblage of ladies and gentlemen from this and the neighboring villages, some of whom came upwards of twenty miles to witness this beautiful and most interesting exhibition."

Nearly fifty premiums were given by the different committees on fruits, flowers and vegetables: among the contributors of flowers who gained premiums, we notice that about all were ladies; we are gratified to find such a taste for flowers prevailing throughout the country, and much more so that the ladies are extending such a taste, by the example they have set in, taking such a prominent part in these exhibitions. An autumnal meeting is to be held at Canadagua, in September.—*Ib.*

The Season.—Extract of a letter from our friend **Willis Gaylord**, dated Otisco, June 9, 1835.

"The backwardness of the spring, and extreme wetness and coldness of April, had a most unfavorable effect upon the operations of the farmer, besides being productive of great inconvenience, and in some parts of the country real distress. Perhaps our flocks and herds suffered as little as in any section, but it will require large quantities of good feed, (which as yet we have not,) and considerable time, to bring them to the condition in which an ordinary winter and spring would have left them. Corn was necessarily planted late, and owing to various causes, its present appearance in general is not promising. Some have been obliged to replant their corn, in consequence of the extensive ravages of the small red wire worm, which attacked the kernel as soon as it became softened in the earth, or as soon as it had sprouted.

Fruit of all kinds grown here, with the exception of peaches, promises well. Many of our peach trees have died, and those which escaped destruction barely lived. The flower buds were so frozen, that but few have opened, while the others have dried up and dropped off."—*Genesee Farmer.*

Mammoth Strawberry.—A strawberry was presented to us yesterday by C. M. Lee, Esq., which measured 8 inches. It was of the Methven variety, and the coxcomb shape, and was fairly measured according to Horticultural usage, by Mr. L. B. Langworthy, in the presence of a number of citizens. The same gentleman produced six strawberries, which measured more than 30 inches, which were selected from a dish of two quarts. In fact, berries of 4 and 5 inches are so common in our best gardens, that they are not noticed since the introduction of the new varieties. We are aware that Rochester has the credit of dealing a little in *poetical prose*, but while other places are croaking about 4 and 5 inch berries, we could not restrain mentioning this very extraordinary production.—*Ib.*

Gama Grass.—We have been informed by James B. Marsh, Esq., that he has lately brought into a state of cultivation this valuable grass, and in the month of May, cut from less than two feet square, two pounds nine ounces green grass. In less than fourteen days after cutting, it grew twelve inches in length; and it may be cut every twenty-five days, until the first of November, or severe frost. He says his horses, cattle, and sheep prefer it to the best of blade fodder; and having tried red-top, timothy, and clover, he is certain that one acre of gama will produce more forage, than ten in those grasses.—*North Carolina Whig.*

Art. III. *Queries, Criticisms, &c.*

Budding Roses.—Your valuable correspondent, J. W. Russell, in your May number, in an excellent communication on the budding of the rose, states that the tea rose may be budded on the stock of boursalts, multiflora, &c., and that they make splendid objects when in bloom, if budded at some distance from the ground, so as to form small trees. I have seen the effect produced by this method myself, and can testify to it as being the very perfection of the culture of the rose. Only imagine the effect of ten or twelve varieties of the moss rose towering above the shrubbery, and showing their moss covered buds, tipped with the morning dew. Your correspondent deserves praise for his excellent hints; yet there are some who have no room for "tree roses," and who have to confine the length and breadth of their flower garden to the parlor: now I have had very ill success in raising the tea roses on their own bottoms, so much so, that I have nearly, if not quite, lost that most valuable of all, the yellow variety. Would Mr. Russell, or some one of your many valuable writers, inform me of the cause, and also of some method by which I may have this desirable species in bloom in the parlor the season through?—*Yours, H. S., July* 10, 1835.

Select List of Apples for a Kitchen Garden.—Can any of your numerous and intelligent correspondents, through your pages, inform me of the most suitable apples for planting a kitchen garden? I am about setting out several kinds this fall, and am unable, from a want of pomological knowledge myself, to select such as will come into bearing in succession, and combine the qualities of fine flavor and beauty for the early kinds, those qualities with good size for autumn sorts, and those same qualities, with late keeping, that retain their firmness, and not becoming insipid before spring. I shall feel much gratified if some one will give me the requisite information. New kinds are continually creeping into our collections, and the varieties are so numerous, that it is difficult to select such sorts as are truly desirable. I am happy to see your Magazine retain its character; the last number is full equal, if not more interesting, than the first. I hope to send you, before long, a communication on some subject, with which I am more acquainted than pomology.—*Yours, An Amateur., Cambridge, July 6th,* 1835.

Grape Vines.—We received a letter, a few days since, from one of our subscribers, requesting us to answer a few queries therein mentioned, relative to the vine; from the pressure of engagements, we did not answer so fully as we could have wished; we consequently insert those queries here, that some of our correspondents, who are acquainted with the subject, will favor him with their opinions. As the queries are numbered, reference need only be made to the numbers.—*Conds.*

"1. Is there much danger of rendering the soil *too rich*, thereby causing the vine to grow too luxuriantly, and thus retard its ripening?

2. Do you, from time to time, during the summer, remove *all* the new shoots which proceed from the laterals, and *do not bear* fruit?

3. When the clusters are very abundant, do you remove the more feeble?

4. Do you nip off the *extremities* of the fruit bearing branches, and, if so, *at what period* of the growth of the grape?

5. Do you cut off the tendrils as they appear?

6. What is your practice about watering your vines?

7. Does it promote the ripening of the grape to remove the leaves, so as to expose the cluster to the direct rays of the sun? My own experiments on a vine the last year, were unsuccessful."—*Yours, P. C., Me.*

Dahlias.—Will any of our readers who are cultivating the dahlia, inform us whether they are troubled with any insects which destroy the leading shoots, and thus cause the plants to branch out and make numerous laterals? If so, and they know of any sure preventive, will they have the kindness to inform us of the method. We are, in this vicinity, troubled with insects, which are very injurious to the dahlia.—*Conds.*

Art. IV. *Quincy Market.*

Roots, Tubers, &c.	From $ cts.	To $ cts.
Potatoes:		
Old, per barrel,	1 25	1 50
Old, “ bushel,	50	
New, per barrel,	2 00	2 50
New, “ bushel,	1 00	1 25
New, “ peck,	33	37½
Turnips:		
New, per bushel,	none.	
New, “ bunch,	4	6
Onions:		
New, per bunch,	3	6
Old, per bunch,	6	
Beets, per bunch,	4	
Parsnips, per bunch,	none.	
Carrots, per bunch,	6	
Radishes, per bunch,	3	4
Horseradish, per bunch,		
Garlic, per bunch,		
Cabbages, Salads, &c.		
Cabbages: per dozen.		
Early York,	50	75
Savoys,	50	75
Cauliflowers, each,	25	
Lettuce, per head,	3	6
Peas: per bushel,	50	1 00
Peas: “ peck,	12	25
Beans:		
String, per bushel,	50	62
String, “ peck,	12	17
Marrow, per half peck,	20	25
Cranberry, per half peck,	20	25
Shelled, per quart,		
Spinach, per peck,	none.	
Tomatoes, per dozen,	50	
Squashes and Pumpkins.		
Bush squash, per dozen,	20	25
Summer crookneck, per dozen,	20	25
West India, per lb.	3	4

Pot and Sweet Herbs.	From $ cts.	To $ cts.
Parsley, per half peck,	50	
Sage, per pound,	20	30
Marjoram,	50	
Savory,	25	37
Spearmint,	80	
Fruits.		
Apples, dessert:		
Old, per bushel,		
Old, “ peck,		
New, per peck,	37½	50
Baking, per peck,		
Pears:		
June eating, per bushel,	3 00	4 00
June eating, “ peck,	1 00	
Cherries, per quart,	8	17
Gooseberries, “ quart,	12	
Currants:		
White, per quart,	8	
Red, “ quart,	6	8
Black, “ quart,	12½	
Raspberries, per quart,	25	37½
Blackberries, “ quart,	25	
Blueberries, “ quart,	12	17
Whortleberries, “ quart,	20	25
Cucumbers, per dozen	25	37
Pine Apples, each,	12	25
Grapes:		
Black Hamburgh, per pound,	75	1 00
White sweet water, “ pound,	50	75
Watermelons, each,	25	50
Muskmelons, each,	37	50
Oranges, per box,	3 75	4 00
Oranges, “ hundred,	2 75	3 00
Lemons, per box	4 00	
Lemons, per hundred,	1 25	1 50
Lemons, per dozen,	25	
Butternuts, (green for pickling,)	17	25
Almonds, per pound,	12	14
Filberts, per pound,	4	6
Castana, per pound,	4	6

Remarks. We have now the pleasure in stating, that the weather, during the last month, has been particularly favorable to the growth of market crops; as was anticipated, new potatoes have come in abundantly, and of fine size; the stock of old ones is almost wholly exhausted; what there are on hand, are principally common kinds. Turnips are brought in plentifully. Of onions, the old stock is rather small; and had not about *eight thousand* bunches arrived from Connecticut, this week, there would probably have been none in the market; those of the new crop come in of good size. Beets and carrots are to be had in abundance. There are but few radishes to be seen, and those not very good.

Cabbages of the early kinds are plenty; a few savoys came to hand this week, the first of the season; a few Cauliflowers were also brought in, but they are not so much wanted now as in the fall. Of such lettuces as were planted for the first crop, there are but few in the market; those of the second sowing are yet small. Peas are abundant. Beans are plenty, with the exception of the marrow and cranberry; the two latter command a good price. Tomatoes are but just received, the first of the season; they sell readily at quotations. Early squashes, of the bush and crookneck kinds, are plenty; a few of the West India yet remain on hand.

There is yet but a few new apples in the market, except those received from Norfolk, Virginia. Pears just come to hand, but not yet abundant; a few of the summer St. Michaels have been received from N.York. Cherries are all gone except the mazards. Raspberries and good gooseberries are rather scarce. Of currants, the crop is very great, and of fine quality. A few whortleberries have been brought in to-day, and were quickly taken. About 2000 watermelons arrived from Virginia, last week; a few muskmelons, of the nutmeg variety, have been also received. Some fine black Hamburgh and sweet-water grapes have been brought in. Pine apples are plenty, several thousand having arrived since our last. Oranges and lemons are scarce. Some green butternuts are brought in for the purpose of pickling.

Boston, July 22d, 1835. M. T.

ART. V. *Massachusetts Horticultural Society.*

Saturday, June 27th.—Exhibited.—From M. P. Wilder, Esq., a great variety of superb Roses; also eight varieties of the Moss Rose, viz.: Moss de la Fleche, Blanch nouvelle, panache, coccinea, common red, blush, single red and white Moss; Pæónia albiflòra, *var.* Whittlejii, hùmeii and fràgrans; Brown's Ophelia Dahlia. From Thomas Mason, Roses, of the varieties York and Lancaster, Tuscany, Globe, Provins, Blush, Perfecta, &c.; Campánula pyramidàlis, Larkspurs, Potentillas, &c.

From S. Walker, Roxbury, Campánula persicifòlia, álba plèna, and purpùrea; Ford's fine seedling pink, Bow's Claudius, and some others; Lysimàchia quadrifòlia, Lythrum salicària, Monárda fistulòsa, Œnothèra macrocárpa, speciòsa, and Frasèrii; Penstemons, Phloxes, Antirrhínum linària, Spiræa filipéndula, Tradescántia virgínica, *var.* rùbra, Verónica sibèrica, Double Rockets, Clèmatis integrifòlia, and the following Roses: Provins, Gloria mundi, Walker's Roxbury belle, blush, &c. From E. P. Hartshorn, Esq., fine moss roses, &c.

From J. A. Kenrick, upwards of seventy-five kinds of named Roses; Pæónia albiflòra, *var.* Whíttlejii and fràgrans; Delphínium sinénsis, Spiræa lævigàta, Lonícera pubéscens, &c. From Messrs. Winships, a large variety of perennial herbaceous, and other plants.

From Messrs. Hovey & Co., the following kinds of superb Roses, viz.:—Belle Adelaide, Belle Aurore, quercifòlia, Belle Auguste, Belle Faber, Capo d' Istria, Deese flore, Duchesse de Montebello, Grand Cels, Lamarque, Olympie, Madame de Stael, Princess Amelie, Berenice, Comte Camaldoli, Etubie, illustrie beaute, La plus foncé des pourpres, Montgolfier, ranunculoides, Temple d' Apollon, Tigridia, tricolor, velour poupre, Warratah, hybride belle Judithe, Lord Byron, Laffay, Bobelina, Calypso, amiable beaute, Alexander Eyries, belle Africaine, belle Isidore, bouquet charmant, Duc de Montebello, Mexicaine, rien ne me surpasse, mirore des Dames, and several others.

From Mr. Thomas Hastings, three boxes of Keen's seedling Strawberries (very fine), and one box Southboro' seedlings; three baskets Methven scarlet, Downton, and Keen's seedlings, from the Hon. E. Vose. From Mr. Artemas Rogers, Watertown, four boxes of the Methven scarlet. From J. L. L. F. Warren, Brighton, one box Methven scarlet; from Mr. Richard Ward, one basket of Methven scarlet; some seedling varieties from Messrs. Hovey. From J. Tidd, Esq., Roxbury, three clusters of white chasselas grapes. A cucumber, the seed received from Milan, by A. D. Williams.

July 4th.—Exhibited.—From the garden of M. P. Wilder, Esq., the following fine Roses:—Grand Monarche, General Bertrand, La Importante, Provins eclatante, Waratah, Royal Blanc, Grand Papa, Prince de Salm, Roi de France, Rose Cortin Baumann, Grand Renoncule, Triomph de Breslau, Gen Druot, Bobelina, Emma, Caulincourt, Mablay, Capo de Istria, Mddle. de Tressan, Enfant, La juine Henry, Rose de Brown, Noisette Camellia, Celestine, Roi de Rose de Brown, Noisette Dufrenoy, Mordant, Princess Amelia, York and Lancaster, Double Provins, Missouri, Lucida plena, Flavia double, Hortulanus, Agathe, Buert, Cramoise feu grand, Amiable Violet, Royal Virgin, Nouvelle Provins, Cramoise Royal, Centifolia aculeata, and many others ; also of Moss Roses,—double red, blush, and white; Blanch nouvelle, Prolific, panache, de la Fleche, feuilles de sage, coccinea and single moss: Dennisii minor, Fielder's mutabilis, and Roke's dwarf scarlet Dahlias. Prolific conical Hautbois, new or black Hautbois, Knevett's new Pine, and Grove End scarlet strawberries, from Messrs. Winship.

July 18th—Exhibited.—From Mr. S. Sweetser, Gladiòlus natalénsis, Agapánthus umbellàtus, and poppies. A variety of poppies, from J. T. Buckingham. Carnations, from L. Josselyn. From Wm. Kenrick, Pinks, phloxes, roses, spiræas, coreopsis, Asclèpias incarnàta, &c. From S. Walker, Asclèpias tuberòsa, Epilòbium angustifólium, Potentílla formòsa, Cicimifùga fœtida, &c.; Phloxes, pinks, and Barratt's Susanna, and Dennìsii dahlias.

From M. P. Wilder, Esq., the following Dahlias:—Barratt's Susanna, Widnall's Perfection, Paragon of Perfection, Inwood's compacta, Agrippina, Lovley's Earl Grey, Lass of Richmond Hill, Cicero, Squibb's Prince George, Le brilliant, Roke's Dwarf scarlet, Coccinea speciosissima, Dutchess of Richmond, and Dennis's præcelentissima; pinks and a new calceolaria. From Messrs. Hovey & Co., Gaillárdia aristàta, Verbèna Aublètia, Asclèpias linària, Petùnia phœnícea, Silène compácta, Phloxes, Veronica, &c.

Gooseberries, from S. Walker. Currants, from S. Whitney. Raspberries and Currants, from Thos. Mason. Gooseberries, from J. L. L. F. Warren. Peas, from N. Harrington.

Art. VI. *Maryland Horticultural Society.*

The Horticultural Society of Maryland held its third annual Exhibition on the 3d, 4th and 5th of June, in the spacious Hall of the "Baltimore Assembly Rooms." Notwithstanding the unusual backwardness of the season, which had caused the postponement of the Exhibition to a time when many of our finest exotics had passed their bloom, the collection was very full, and what we had lost in some species, was made up in others that we could not have had at an earlier day. The display of roses, particularly, was splendid beyond any former example in this city. Almost every variety of garden rose was in high perfection, and their number and quality, when collected and contrasted in the Hall, was most gratifying. The pæonies, also, made a fine display ; though most of the varieties were out of bloom, we yet had the queen of the tribe, the splendid Whitleji, or large double white ; and her two beautiful handmaids, the humei—the splendid double pink—and the fragrans, or double rose scented. These three are the finest of all the herbaceous kinds, though there are very many truly elegant ones. In one garden in this city there are *twenty-four kinds.* This splendid plant ought to be more generally introduced into private collections, as it is perfectly hardy, and requires neither care nor labor, after the roots are put into the ground.

Of the many splendid exotics that attracted particular attention, the *Cactus speciosissimus* was decidedly the favorite. There were several large plants of it in fine bloom, and in high perfection. The peculiar lustre of the inside of the flower was uncommonly brilliant. The Cáctus speciòsus, and Cáctus Jenkinsònii also attracted much attention; while the Society and visiters were gratified with the sight of one of the same family in bloom for the first time in this city: it was the Cáctus Ackermánii, a very fine species, with deep-red flowers. Amaryllises, particularly the Johnsonienses and the vittata, made a fine show.

In the evening, on the second day of the exhibition, the annual address was delivered by Francis H. Davidge, Esq., and was pronounced an appropriate and eloquent specimen of oratory.

The exhibition was closed on the evening of the third day, by the distribution of premiums, a ceremony that seemed to excite considerable interest. The Society and visiters present were called to order by the President, B. I. Cohen, Esq., when the Secretary read the reports of the several committees appointed to award the premiums; after which, J. P. Kennedy, Esq., Vice President, presented to each successful competitor the premium awarded him.

The Committee of Arrangement are entitled to the thanks of the Society for the excellent "getting up" of the Exhibition. The various plants and cut flowers were tastefully disposed, and arranged in the best manner to give due effect, so that, while no individual plant or flower was hidden or made to "blush unseen," the beauty of each and the whole collectively was heightened by combination and contrast. To the ladies who politely contributed their aid and advice in the arrangement, the Committee and Society were greatly indebted, and the present is adopted as the earliest and most appropriate mode of conveying to them the Society's thanks.

The following is a list of the most prominent objects, and the names of the contributors.

Vegetables Exhibited.—By Mr. James Stronicke, gardener to J. B. Morris, Esq., four fine Cauliflowers and Kidney Potatoes. By Mr. Edward Keen, two fine bunches of Asparagus. By Mr. Gideon B. Smith, two fine bunches of Rhubarb. By Mr. Peter Coombs, two fine Cauliflowers, and fine yellow Radishes. By Mr. Richard Vallentine, a fine bunch of Rhubarb. By Mr. Wilhelm, gardener to Mr. Ridgely, of Hampton, two fine Cauliflowers, Snap Beans, and Cucumbers. By Mr. Thomas Dixon, one peck of peas and fine spring Lettuce. By Mr. Thomas Kehoe, gardener to Col. B. C. Howard, one peck of Peas, Cucumbers, Potatoes, and Cantaloupes. By Mr. Laurence Aherne, gardener to W. H. Freeman, Esq., one dish of blue Potatoes; one dish of white do., very fine for the season. By Mr. Edward Doran, two fine early York Cabbages and Lettuce.

Fruit.—By Mr. Samuel Feast, specimens of the Bourbon Strawberry, and the scarlet Strawberry. By Mr. Edward Keen, specimens of the Bourbon Strawberry. By Mr. George Duncan, specimens of the Bourbon Strawberry. By Mr. Peter Coombs, specimens of the Bourbon Strawberry. By Mr. H. V. Somerville, specimens of the Bourbon Strawberry and Currants. These were all very excellent fruit, and made a fine display, each contributor presenting several boxes of them. By Mr. D. W. Hudson, some fine Strawberries. By Mr. James Stonecke, some fine Strawberries. By Mr. Robert Sinclair, Sen., seven fine varieties of Gooseberries. By Mr. Vallentine, from the garden of the late Robert Oliver, some fine Gooseberries. By Mr. Thomas Kehoe, from Col. B. C. Howard's garden, some very fine Gooseberries. By Mrs. Tracy, fine Currants and Strawberries. By Mrs. Beacham, seven varieties of Gooseberries, very fine. By Mr. Zebulon Waters, a dish of the White Orleans Cherry. The Gooseberries were of course not ripe, but were considered very fine, and indicated the increased attention that this excellent fruit is exciting amongst our gardeners.

Flowers.—By Mr. James Carroll, large plants of the Agave americàna, and Cáctus Cochinelífera, or cochineal plant, cut flowers, &c. From the collection of St. Mary's College, Bonapártea júncea, Fícus elástica, austrális and nifica [nítida] Bánksia formòsa [Dryándra formòsa] Sago Palm, Date Palm, New Zealand Flax, Acacias and many other fine plants. By Mr. Robert A. Taylor, Cáctus speciosíssimus, in fine bloom, and C. speciòsus, with many other fine plants. By Mr. Evan Thomas, Strelítzia regína, Cáctus speciosíssimus and Jenkinsònii, Ardísia coloràta, &c. By Mr. Henry Schroeder, Rhododéndron pónticum, in full bloom, Cèreus speciòsus, Yúcca aloifòlia, with other fine specimens, cut flowers, &c. By Mrs. Riggs, splendid bouquets of cut flowers. By Mrs. W. H. Freeman, twenty-five varieties of Garden Roses, cut flowers, &c. By Mr. Wm. T. Worthington, specimens of the Gloria mundi and Cabbage Roses, which were very fine. By Mr. Wm. Thomas, Rhododéndron, pónticum, with other fine flowers. By Mr. Gideon B. Smith, a fine, collection of Roses, among them the Herbemóntia grandiflòra, Midas, &c.; Pæónia albiflòra, *var.* Whíttlejii and fràgrans, &c. By Mrs. Geo. H. Keerl, Verbèna chamædrifòlia and Aublètia; Pittósporum tobíra, with a fine collection of cut flowers. By Mrs. Thos. Kehoe, from Col. Howard's, Carnations with cut flowers, &c. By Mr. Tho's Dixon, from Mrs. J. Donnell's, fine cut flowers. By Mrs. J. B. Morris, some fine carnations, cut flowers, &c. By Mrs. R. L. Colt, a fine air plant, with others, and a fine collection of cut flowers. By Miss Rachel Cohen, Cáctus speciosíssimus in full bloom, the flowers measuring upwards of six inches in diameter. By Edward Kurtz, Bánksia formòsa, Corræa pulchélla and viridiflòra, Thèa bohèa and víridis, Cáctus speciosíssimus, Cèreus speciòsus, Amaryllis regína, Azàlea sinénsis, A. ledifòlia, and póntica, with a fine collection of Geraniums, consisting of Lord Yarboro', Daniel Webster, Duke of Northumberland, Russellianum, De-Vere, with many other varieties, cut flowers, &c. By Mr. Zebulon Waters, Pelargoniums, a fine collection of Calceolarias, Jambòsa vulgàris, Cáctus speciosíssimus, several varieties of Phlox, and many other fine plants. By Mrs. B. I. Cohen, Erythìna crísta-galli, Amaryllis Johnsònia, Eránthemum pulchéllum, Aloe carína, &c. By Mr. James Wilkes, Metrosidèros semperflòrens, Lauristinus, &c. By R. Sinclair, Sen., cut flowers, comprising thirty varieties of roses. By Mr. John Feast, Cáctus speciosìssimus, Mango tree, Smith's yellow noisette Rose, Mùsa sapiéntium, Amaryllis vittàta, Sprengèlia incarnàta, Calceolarias, Stercùlia platinifòlia, Azàlea verticillata (?) Phórmium tènax, Date Palm, Petùnia, a collection of Pelargoniums, including the rarest varieties, Magnòlia fuscàta, Clèmatis flórida, Justicia, &c. By Mr. Samuel Feast, Camphor tree, Coffee tree, Cinnamon tree, Cáctus Ackermánii, (in flower for the first time here) [noticed at p. 222 as flowering at Belmont place] Cèreus speciòsus, with seventy-five flowers, Leucadéndron argéntium; Bohea and Green tea trees, Ardísia crenulàta. and solanàcea, Amaryllis Johnsònia, Calceolarias, Sago Palm, Gardènia flórida and Thunbérgia, Fícus austrális Melaleùcas, Metrosidèros, Ericas, fine Pelargonums, Burchélla capénsis, Crínum amábile, and asiáticum, Dracæna férrea, Clèmatis flórida, Mímulus Smíthii and cut flowers, comprising above one hundred varieties of roses, &c.

The contributions of cut flowers, were most liberal, comprising an immense variety, and in great profusion,—so much so that several large stands and an immense number of vases, &c. were occupied by them. It is more than probable that some of the names of the contributors may have escaped notice; if so, it is hoped that the omission will be attributed to the hurry and confusion incident to such occasions.

The Committee of arrangement, and the society, take this occasion to return their thanks to all the contributors, as well of cut flowers, as of plants, fruit and vegetables.

The following Premiums were awarded by the several committees of the Horticultural Society, at the third annual exhibition.

It should be observed that the articles for which these premiums were awarded, are produced and exhibited during the year commencing the Saturday following the last day of the last annual exhibition, and consequently embrace many articles not exhibited at the present exhibition. And also that, besides these premiums, the Society has awarded a special premium for some meritorious articles every Saturday since about the 15th of April last.

Vegetable Department.—For the best Cauliflowers, to Thomas Kehoe, gardener to Col. B. C. Howard, $5. For the best Lettuce, to T. Kehoe, do. do., $3. For the best Rhubarb, to Wm. Feast, $3. For the best Beets, to Thomas French, $3. For the best Onions, from seed, to Caleb Whittemore, $3. For the best Cape Brocoli, to C. Whittemore, $3. For the best Celery, to Edward Doran, $3. For the best Egg Plants, to Robert Dore, $3. For the best Tomatoes, to Thomas Dixon, $3. For the best Lettuce, open ground, to George Duncan, $2. For the best Early Potatoes, to Thomas Dixon, $3. For the best Salsify, to Peter Coombs, $3. For the best Asparagus, open ground, to Peter Nante, $2. For the best Crookneck Squashes, to Peter Coombs, $3. For the best Pickling Cucumbers, to Edward Keen, $2. For the best Lima Beans, to Richard Vallentine, $2. For the best Snap Beans, to Mr. Wilhelm, gardener at Hampton, $2. For the best Garden Peas, James Pitcher, $2. For the best Early York Cabbages, a discretionary premium of $2.

Fruit Department.—For the best Peaches, one peck, the amateur premium, to Geo. W. Miller, $20. For the best Strawberries, (*last season,*) to James Maidlow, $3. For the best Raspberries, to Caleb Whittemore, $2. For the best Gooseberries, to Andrew Clarey, $4. For the best Cherries, to John B. Bastian, $3. For the best Pears, to James Stronecke, $5. For the best Foreign Grapes, to Thomas Holmes, $5. For the best Native Grapes, to R. Sinclair, Sen., $5. For the best Plums, to Mrs. B. I. Cohen, $3. For the best Early Apples, to Wesley Hancock, $3. For the best Apricots, to Mrs. Leonard Frailey, $3. For the best Figs, to Miss Eliza Schroeder, $2. For the best Cantaloupes, to Henry Thompson, $3. For the best Winter Cantaloupes, $3. And the following discretionary Premiums, viz.: For fine Oranges and Lemons, to James Carroll, Jr., $5. For a fine seedling Peach, to Mrs. W. J. Alcock, $5.

Ornamental Department.—For the best collection of Camellia japonicas, to Edward Kurtz, $10. For the best Seedling Camellia japonicas, to Edward Kurtz, $6. For the best collection of dahlias, to S. Feast, $5. For the best seedling dahlias, to G. B. Smith, $5. For the best collection of heaths, to S. Feast, $5. For the best collection of Azaleas, to John Feast, $5. For the best collection of Amarylises, to Z. Waters, $3. For the best collection of Auriculas, to S. Feast, $5. For the best Seedling Pelargoniums, to J. Feast, $3. For the best collection of Tea Roses, to S. Feast, $3. For the best collection Chrysanthmums, to Mrs. George H. Keerl, $2. For the best collection of Carnations, to Capt. Thomas Holmes, $2. For the best collection of Tulips, to Henry Moore, $2. For the best collection of Hyacinths, Mrs. B. I. Cohen, $2. For the best collection of Primula polyanthuses, to John Feast, $2. For the finest and rarest Exotic, to Samuel Feast, for his splendid new Rododéndron hybrida, $5. For the best collection of succulents, to St. Mary's College, $5. For the best collection of herbaceous plants, to John Feast, $3. For the best managed Green-house, to Mrs. Thomas L. Emory, $15.—*Baltimore Farmer and Gardener.*

Art. VII. *Meteorological Notices.*

FOR JUNE.

Throughout June, the weather was rather cooler than the month, in seasons in general. There was one or two severe showers, accompanied with thunder and lightning. Prevailing winds, as will be seen in the following table, from South to West.

Thermometer.—Mean temperature 61° 11′. Highest 80°—Lowest 42° above zero.

Winds.— N. E. one day—E. nine—S. seven—S. W. one—W. nine —N. W. three.

Force of the Wind. Very brisk two days—brisk twenty-three days —light five days.

Character of the Weather. Fine fourteen days—Fair twelve days—Cloudy four days.

Rainy two days—*Showery* four days.

MONTHLY CALENDAR

OF

HORTICULTURE AND FLORICULTURE,

FOR AUGUST.

FRUIT DEPARTMENT.

Grape vines, in the green-house or grapery, should have all small superfluous shoots trimmed off, as also the tendrils, as soon as they appear; syringe every other day with pure water; water those in pots, with liquid manure, and keep them regularly tied up to small sticks.

Those in the open air should have their bunches thinned out, cutting away all small and weak ones; keep the main shoots free from all laterals or tendrils, and by no means allow the vines to get matted together.

Peach trees, in pots, should have their roots watered with liquid manure, and the tops syringed twice a week.

Strawberry beds should be kept free from weeds, and the runners, unless they are wanted to make new beds, should be all cut off, (p. 299.)

FLOWER DEPARTMENT.

Carnations may still be layed.

Chrysanthemums should now be potted into the pots for flowering, (p. 138.)

Roses should be budded this month, as later they will not do well.

Green-house plants should still be propagated.

Biennial and perennial flowers. Transplant these from the seed beds, into the borders, where they are to flower.

Mignonette should now be sown, to flower during winter.

THE

AMERICAN

GARDENER'S MAGAZINE.

SEPTEMBER, 1835.

ORIGINAL COMMUNICATIONS.

Art. I. *Aberration from Animal Instinct.* By J. L. R******.

The economy of the animal creation is at all times a great and constant source of deep and interesting study. The singular provisions of nature for the support and preservation of the numerous and diversified forms of animals, strike us with amazement. The imperfect faculty of reason, which we in our ignorance of understanding can only term instinct, leads us to the most curious and interesting reflections on the wisdom of Creative Power. We are thus apt to deem it an infallible and imperative law, which, guiding the being in which it exists, becomes as it were assimilated with its very organization. Yet it is very evident, that this same "blind" instinct is capable of education, under favorable or fortuitous circumstances. Instances almost innumerable may be adduced, where such circumstances have occurred, and in consequence, the blind instinctive law has been violated.

A singular instance of this fell under the writer's observation on a late visit to his friends. Believing that every incident, however seemingly trifling, is of importance to the study of nature, and of interest to every lover of the same, he has ventured to communicate it, through the medium of your pages.

Early in February of the present year, a summer parlor, which had been closed since the autumn, had occasion to be opened. Notwithstanding the unusual severity of the season, the excellent lady of the house was surprised to find therein an unexpected and unbidden guest, who, not waiting until the usual compliments of invitation were issued, had intruded its company in a most unceremonious manner. After some difficulty, the little stranger was secured, and conveyed to an adjoining grove, and was liberated, to seek a more suitable home. Not contented with the simple use of the best apartment of the house as an elegant and secure retreat from the winter storms, it had also conveyed, with incredible pains, a considerable quantity of nuts and acorns, whose shells lay in a very ungenteel manner on the carpet. These remnants of a luxurious banquet from nature's bounty, had before attracted the attention of the household, and being quite untidy affairs, were sorely puzzled to discover how they came. The little grandchildren were under blame, for children are thoughtless and mischievous, and grandmothers, as well as nature, indulgent in their gifts. The room, however, was again closed, after a temporary use, and the incidents forgotten.

But the unceremonious visitant was not to be frustrated in its design of casting itself on the protection of the human species. It was again subsequently discovered in the identical room, by some circumstance which attracted attention, and its hiding place, for such it had, diligently sought. Every crack, crevice, nook, corner, closet, was literally ransacked without success. At last a table-drawer was opened, and there lay, gentle reader, a most beautiful object, you can imagine,—a perfect and curious nest of singular materials and wondrous fabric, and within, several young in secure repose. It was the nursery of one of the most graceful objects in the animal world, whose agile motions and silky coat has no doubt often attracted your notice and admiration when flitting from tree to tree in its native woods. It was the little domicil of a flying squirrel; ("Pteromys Volucella." Desm. et Godman, *Am. Zool.*, Vol. ii., p. 146, and corresp. pl., fig. 1.) Its nest was entirely composed of the shreds of the hearth rug, whose edges were gnawed, and most innocently appropriated to that end. Neither nature nor necessity know any law, nor recognise any such artificial distinctions as "trespass on property;" and the kind and provident mother of a helpless family might reason on the principle of "Lex talionis," that whatever was once unlawfully taken from another, could with equal propriety be taken again. But whether such were the cogitations of our little friend, which had insinuated itself into our notice, I know not, and leave the matter to be settled by wiser and older heads,—by metaphysicians and others who have to do with theory rather than facts. Be that as it may, it had shown no little discrimination in matters of combined elegance and comfort. Behind the drawer and between its back part and the leaf of the table, was a small narrow aperture, and through this hied the careful mother, in her hours of peace or alarm, to a quiet home. In this apartment were several pencil drawings untouched and unsoiled, evincing an evident taste for the fine arts. The whole family were, however, removed to a cage, to which it resorted to supply the necessary food, until, jealous of the frequent visits of the curious, it took a good occasion to remove both itself and its charge. The only possible access to the room from the adjoining woods was down the chimney, and as such entrances for visiters are in these days rather unusual, no one thought of such an occurrence.

The flying squirrel constructs its nest in some hollow tree; but what deviation of "blind instinct" impelled it to seek so curious a resort, and so pertinaciously to resist every attempt to exclude it?

J. L. R******.

August, 1835.

Art. II. *On the natural Love of Flowers.* By A Correspondent.

There are men among us, who look upon the cultivation of flowers with perfect contempt. They can see no utility in this occupation, and look upon the amateur florist as a lack-a-daisical, sentimental character, more fitted to write sonnets and to read novels, than to act efficiently in the business of life. To such, the fragrance of the rose, the tints of the lily, and the delicate formation of the violet, are for ever lost; an avenue to pleasure open to others, is to them completely closed; a sense, which to others is the source of much pleasure, is denied them; the light of beauty radiating from each bud and blossom, is shut out from their minds—for, though the form and substance of creation be admitted, its soul—its expression, never reaches them.

Such claim to be our matter-of-fact men—utilitarians—the most useful members of society; they believe that they have great duties to discharge, and have no time to spare to examine matters of so small moment. Flowers, they admit, are *pretty things*, fitted to please the idle—pretty things, indeed, but mere toys for the young and romantic—they, forsooth, have occupations of more importance than to multiply and increase such trifles; and from their eminence they look down with contempt upon the grown-up man who wastes his valuable time in the cultivation of these insignificant objects.

They forget that this world is not a mere matter-of-fact world; they overlook the truth that the Deity, in providing the fruit and the grain, has not been unmindful of the blossom and the foliage. He stayed not his hand at mere utility as regards animal life; he bounded not his creative power to the production of food and raiment; he ministered not merely to the actual wants of life, but clad the fields in verdant green, tinged the fruit with its golden hue, and added a surpassing beauty to foliage and flower. Shall we eat and drink, and forget His ministration to our moral taste?

No one was ever intended for a mere business man—to travel, as in a bark-mill, in one dull, dreary round--day in and day out—month in and month out—year in and year out—to exert every faculty, with all his energy, in the business of life. Men are not created as machines, for the production of a required amount of a useful commodity. They have more to do, than to earn their bread and to eat it; more to accomplish, than to strive for a high station, and to fill it. Man has a moral nature to be strengthened and educated; he has a susceptibility of soul, to be touched and excited: and all this is most quickly and easily accomplished, by an attention and constant reference to the works of Him who has left, wherever his hands have wrought, the marks and types of those attributes, which warm and purify and exalt the heart. Without this moral culture, man is an animal only, as unlike the being he should be, as the mere grain of wheat, fitted to sustain life, is unlike the waving corn, in all its richness and loveliness, as it covers the mountain side.

Why is it, that those who enter upon the examination of the works of nature, in any of her various channels and departments, become so enthusiastic in their research? Why does their ardor constantly and regularly increase with the increase of their knowledge? Read the lives of eminent naturalists, look to the zeal manifested around you by all who have entered into such studies. It does not arise from mere increase of intellectual power, as affording valuable results to society; for duty here is often discharged from a sense of duty, without any ardor of feeling. It is not the mere force of habit; for habit is more like the chain which binds one to a given course, than wings to fly with to objects which we love. It is because there is a natural taste in every man, which, when gratified, becomes strengthened and quickened—a taste for the magnificent and beautiful objects in creation which can never be satiated, but which carries us onward in our researches,—an appetite which grows with that it feeds upon.

It matters not what department of nature we explore; it matters not whether we examine the earth, look to the monster of the deep, or seek the shells of the beach; whether we look to animal life or the vegetative process. The heavy mammoth, the insect floating in the air, the rugged mountain, the bright crystal of its bosom, the lofty tree, and the simple flower at its foot, afford the same result; they each read to us the same lesson. The paths open before us are numerous, yet they all lead to the presence of a God, sustaining and beautifying the creation he has formed; and the florist, in the path he has chosen, will find at each step of his progress, distinct traces of the goodness of God, in thus providing so bountifully for the taste he has imparted; for not a flower expands itself, not a blossom opens its leaves, but speak to him in language, which, if attended to, will make him a better and a happier man.

Portsmouth, Aug. 6th, 1835.

ART. III. *Select List of Fruits for planting a Kitchen Garden.* By MICHAEL FLOY, JR., Nurseryman, New York.

GENTLEMEN,

IN reply to "An Amateur," desirous of obtaining a list of the most suitable apples for a kitchen garden, I will give a few hints, the result of some years' experience; this is necessary in every branch of gardening, but in that which relates to the growing of different kinds of fruit, what to retain and what to reject, it is every thing. Of the American apples we are certain; and if we hear of a kind in high esteem, we may without hesitation adopt it: this is not true with respect to many varieties of foreign origin, and which bear a high character in the English pomological works. The American apples send forth shoots of a vigorous growth, of a dark glossy appearance; many of the English apples in this country send forth feeble wiry shoots, of a copper colored appearance, leaves crumpled under the influence of an American sun. They may be said to grow, and that is all. Whether they will ever repay the labor of raising, or for the room assigned to them, is in my opinion very problematical. It may therefore not be unacceptable to give first a list of those apples which I have found to fall under the above character. In this list I regret to place the deservedly universal favorite among the English, the golden pippin; but in the subsequent list, there will be found the Ribston pippin, the Franklin's golden pippin, the Hawthornden, the Sam Young, the Cole apple, and many others, in nearly as high estimation as the golden pippin. The list is as follows:

Cornish aromatic,
— gilliflower,
Court pendu,
— of Wick,
Golden noble,
Gravenstein,
Hubbard's pearmain,
Longville's kernel,
Margil,
Pippin English golden,
— Downton,
— sugarloaf,
— Wormsley,
— Crofton,
Royal Stubbard,
Yellow Ingestrie,
Red —

The annexed list contains sorts proved to be good; those marked * are foreign, and have succeeded well, though not quite as well as the American. Those marked in addition thus † have proved fully equal to the American sorts, and are well worthy of a general cultivation throughout the country.

SUMMER FRUIT.

* Borovitsky,
* † White Juneating,
* Red —
* Oslin,
* † Red quarenden,
Early Harvest,
* † Spring grove codlin,
Summer golden pippin,
* † Early Alexander,
* Early red Margaret.

AUTUMNAL FRUITS.

* Bere court pippin,
* Franklin's golden do.
* † Padley's pippin,
* Wyker do.
* † Cole apple,
Æsopus Spitzemburg,
Fall pippin,
Hoary morning,
* † Golden Lexington,
* Hawthornden,
* Transparent codlin.

WINTER FRUIT.

* Barcelona pearmain,
* Lamb Abbey, do.
* † Fearn's pippin,
* † Norfolk beaufin,
Rhode Island greening,
* Sam Young,
* † Ross' nonpareil,
* Brassick's do.
Newtown pippin,
* † Ribston do.
Bellflower
* Male Carle

CIDER.

Harrison,
* Red styre,
* † White do.
* Coccagee,
* † Foxley,
Campfield.

In a future communication, I may say something respecting the selection of cherries, having paid considerable attention to them. Respectfully yours,

MICHAEL FLOY, JR.

Harlæm Nursery, Aug. 4th, 1835.

For the above excellent list of fruits, our correspondent, whose query was inserted in our last, as well as all our readers, must be exceedingly indebted to Mr. Floy. His experience has enabled him to ascertain the true character of all the varieties he names. We have no doubt but he will find many cultivators of fruit in this vicinity, who have with regret, like himself, discovered that the "glorious golden pippin," as many of our transatlantic friends have termed it, will not bear its loads of glittering fruit under our clear sky and scorching sun. Indeed, in Britain, it is no longer that universally cultivated and deservedly admired fruit it was fifty years since: it has degenerated from its original excellence, and this degeneracy has been a subject of much discussion among those who have professed a considerable knowledge of vegetable physiology, and at the head of which may be named the intelligent president of the London Horticultural Society, (p. 265). It was at one time, in fact, supposed by many cultivators, that it would be lost to the English gardens for ever. Proceeding upon the idea, which Mr. Knight considers a true one, that all varieties of fruit have but a short existence, this would have been naturally supposed; but it has been doubted by some, and the cause of its failure to produce the golden pippin of former years, ascribed to improper treatment, and undue attention to its cultivation. In Mr. Floy's list of uncertain kinds in our climate, is also placed that beautiful fruit, the Gravenstein, and which is so highly rated in foreign pomological works: the court of Wick pippin, court-pendu, and several others, which make such a brilliant appearance, figured in the Pomological Magazine. It is to American apples that we must look for varieties that will repay the cultivation: let them be improved as the English have improved theirs and no fear need be apprehended that our gardens will not show to every lover of this noble fruit, a more numerous and finer selection of apples, than any other country can produce. Other communications in answer to "An Amateur," from any of our correspondents, will be inserted with pleasure.

We shall be exceedingly gratified to give Mr. Floy's intended paper on the cherry, and shall look forward with pleasure to acknowledge its receipt.—*Conds.*

Art. IV. *Remarks on the Treatment of the Amaryllideæ.* By A. B. C.

Gentlemen,

It is generally acknowledged, that there is not a more beautiful, curious and interesting family of bulbs, when well grown, than the Amaryllídeæ; the only objection, by many individuals, to their general cultivation, is, that they do not bloom freely, while the fact is, if properly treated, they flower profusely. The following is my method of treating, this splendid tribe: if you think it worthy a place in your valuable Magazine, it is at your service. I invariably keep the bulbs dry, (with the exception of a few varieties which require to be kept growing in winter and dormant in summer) during winter, in a temperature of 38° to 45°; when towards spring, I examine them, and take those that show signs of vegetation, divest them of all decayed roots and old soil, and put them in five inch pots [No. 3,] in the following fresh compost: three parts fresh loam, three parts manure, at least two years old, and completely decomposed, three parts mould formed from decayed leaves, or what gardeners call vegetable mould, and one part sea sand; when I cannot obtain the latter, I put a handful of salt to a bushel of the compost. Mix all well together, put half an inch of broken tiles or broken soft bricks into the bottom of the pots; finish with half of the bulb above ground, and then place them in an airy situation, where they will be fully exposed to the rays of the sun; water sparingly till the leaves or flower stems advance; as they grow, they require to be more liberally supplied. In, or about the second week of July, many of them will need to be shifted into pots one size larger [No. 4]. About the end of September, begin to withhold watering, gradually, until November, when it is to be entirely suspended; the roots are then to be put away dry, in the same pots, until spring.

I then take them out as they begin to grow, and give them gentle waterings, increasing it as they advance in growth. In July I again shift them into pots a size larger [No. 5]; they will now be in pots of seven inches diameter. In the following spring they are divested of all decayed roots, soil, &c., and put into five inch pots, as the previous season, going through the same process every two years, never using pots under four, nor over eight inches. By the above treatment, I never fail to have a profusion of bloom, from March to June, and even later; I have had Amaryllis amábile produce twelve flowers, and A. Johnsònii fifteen, forming grand umbels, or rather large clusters of crimson and scarlet, and crimson and white, which at that period of the season, stands unrivalled in charming and gorgeous beauty.

Those varieties mentioned, as requiring to be kept growing in winter and dormant in summer, I may distinctly specify at another time.

A. B. C.

Pennsylvania, July 22, 1835.

A more beautiful family, and one deserving more general cultivation, is not to be found in the whole catalogue of greenhouse bulbs, than the Amaryllideæ: the diversity of their colors, their various shaped flowers, and their splendid appearance, should give them a place in every collection ; adding to this, the facility with which new varieties are raised, and the certainty of procuring beautiful kinds, their value is doubly enhanced. We can testify to the results of the method of practice, as detailed in the above communication, they having come under our observation, and would recommend to lovers of this tribe a careful and attentive perusal of it. If they have heretofore cultivated with disappointment, they will, we are sure, after reading this, not be subjected to such for the future. This is the second communication we have received from our friends at the south, but we have had many more promised us, which we hope in due time to present to our readers.—*Conds.*

ART. V. *The Apple Orchard.* By Mr. E. SAYERS, New York.

MESSRS. EDITORS,

IN calling your attention to the apple orchard, I hope also to invite the attention of a portion of your intelligent readers, not with a supposition that my subject is *altogether* of a correct conclusion, but deserving a full investigation, as a consequence of national welfare.

I think no person will dispute my assertion, in considering the apple as the staple fruit of North America, which is clearly seen, when its qualities are a moment duly estimated. The apple forms a prominent feature in the dessert, at almost all seasons of the year; it is used green and ripe, in tarts, puddings, pies, and in sauces, preserves, and the like; and lastly, in a liquid form, we obtain cider, vinegar, and so on; and in all these domestic uses, I believe it to be considered as wholesome to the consumer,—and hence its real value as a fruit.

Having given a statement of the qualities of the apple, I shall now endeavor to point out some inducements to the culture of the apple orchard. The fruit for some years has been abundantly plentiful to supply every demand, and surplus for exportation. This plentitude has in a measure reduced the value in the eye of the purchaser; but a scarcity will soon bring its due value to the consumer. I think there are reasons to show that the average produce of the apple, at no very distant day, will not be equal to the demand of the increasing population. In the first case, an increasing population demands a greater supply of fruit; and, secondly, it greatly decreases the product, by the rapid growth of towns, villages and the like, where the apple tree is cut down to give place to stores and dwellings, which is exemplified in almost every town, and apparent to every observer. The constructing of rail-roads, canals and public thoroughfares, also deter, in a measure, the formation of the apple orchard in almost all parts of the country, which will be seen by observation. Many trees are also cut down, owing to old age, and many for fire-wood and other purposes of domestic use; but few young trees are planted at the present day, to fill up the deficiency of those decaying, and yearly dwindling away, which, in time, must prove, that scarcity will be the result in general, especially if the crops are light.

Upon a careful examination of the principal apple orchards now extant, it will be seen that the trees are mostly old and past bearing. These orchards were probably planted some sixty or one hundred years ago, at which time it appears that it was customary for almost all householders to plant this fruit about their premises for their use. As in most cases, such plantations are found to consist of appropriate varieties for such purposes. The increase of produce obtained from these plantations having been very productive, has proved to be quite equivalent to the demand of the public; and hence the neglect of new plantations in most sections of the State. But *old age* and *decay* is now sweeping away rapidly these once fruitful orchards. Such aged trees are also liable to the casualties of decaying nature, and suffer under many pending injuries, as insects, heat, cold, &c., more than trees of the same variety, under the same circumstances, in a young and thrifty state.

It would be useless for me to treat, in this place, of the culture of the apple, which is well known to every intelligent person, and which will require a larger space than could be admitted at this time in your Magazine; but should this communication prove to be a correct statement, and lead the enterprising planter to a satisfactory examination of what, to me, appears to belong to all classes of people as a source of comfort and national import, my expectations will be fully answered. Yours, &c.,

E. Sayers.

New York, August 10, 1835.

Art. VI. *Floral Calendar of the Flowering of Native Plants, in the Vicinity of Pittsburgh, Penn., from March to May*, 1835. By John Lewis Russell, Prof. of Botany and Veg. Phys. to the Mass. Hort. Soc.

b. f. Beginning to flower.
f. f. In full flower.

March 10, Alsìne mèdia, *b. f.*

" 31, Claytónia virgínica, *b. f.*

April 6, Corydàlis cucullària, *b. f.*

" " Hepática trilòba, *var.* álba, *f.f.*, and *var.* acutilòba.

" " Sanguinària canadénsis, *f. f.* Dentària laciniàta, *f. f.* Erophìla vulgàris, *f. f.* Claytónia virgínica *f. f.* Claytónia latifòlia, *f. f.* Pòa sp. *b. f.* Staphylea trifoliàta, *b. f.* Aràbis lyràta, *b. f.*

April 11, Thalictrum anemoneoèdes, *f. f.* Thalíctrum dísicum, *b. f.* Laúrus bénzoin, *b. f.* Càrex sp. *f. f.*

April 14, Phlóx setàcea, *f. f.*; a beautiful species, seldom seen in collections, resembling P. subulàta; flowers white or purple. Aràbis lævigàta, *f. f.*

April 15, Epigæa rèpens, *f. f.*

April 23, Trillium sessìle, *f. f.*; an elegant plant, with variegated leaves and purple flowers. Trillium rhomboìdeum *Mx. f. f.* T. rhomboìdeum, *var.* aturpurpùreum, *f. f.*; 2d *var.* flàvum, *f. f.* Tríllum grandiflòra, *f. f.* Asàrum canadénse *f. f.* Pulmonària virgínica, *f. f.* Phlòx divaricàta, *f. f.* Jeffersònia diphylla, *f. f.*; very abundant in rich alluvial woods. Viòla canadénsis, *f. f.*; one of our finest native violets; flowers purplish white. Ranúnculus abórtivus, *f. f.* Córnus flórida, *b. f.* Laúrus bénzoin, *f. f.* Lepídium virgínicum, *f. f.*

April 28, Caulophyllum thalictroìdes, *f. f.* Eugènia bulbòsa, *f. f.* Stellaria boreàlis, *b. f.* Erythrínum americànum, *b. f.*

April 30, Dentària diphylla, *f. f.* Polemònium réptans, *b. f.* Pediculària canadénsis *b. f.* Mitélla dyphylla, *b. f.* Viòla rotundifòlia, *b. f.*

May 4. Senècio gràcilis, *f. f.* Erythrònium álbidum (*Nutt.*) *f. f.*; this would be a very desirable addition to our gardens, in company with our E. Déns-cànis, (americànum); flowers delicate purplish white; sepals at base, yellow. Sèdum ternàtum *f. f.* Dielytra exímia, (*De Candolle*), *f. f.*; resembles D. formòsa, better known as "Corydàlis formòsa;" but instead of rose-colored flowers, it has the purest white, and highly scented; root tuberous. As a new and rare species of that elegant vernal family of plants, it is worthy the attention of the floriculturist.

The first blossoms of the peach (Pérsica vulgàris) and cherry (Prùnus ceràsus, *L. var.*) were seen on the 23d April.

It is to be observed that the season was several weeks later than usual, and vegetation was rather more than usually tardy in its operations.

JOHN LEWIS RUSSELL.

Pittsburgh, Pa., May, 1835.

ART. VII. *On the Structure and Formation of Flowers.* By J. W. RUSSELL, *Superintendent at Mount Auburn.*

THERE are a great many persons extremely fond of flowers, that have very erroneous ideas of their structure and parts of fructification. I think a few brief remarks, circulated through the medium of your very excellent Magazine, on this subject, will be interesting to a portion of your readers.

By a flower was originally understood what is now considered as only forming a part *not* essential to the reproduction of the species; namely, the calyx, corolla, or bractes. Linnæus has defined a flower to consist of such parts as are necessary to the production of seed; and hence infers, that its essence consists in the stamina and pistillum. But we certainly speak of the flower of a cucumber, which has only one of these parts, or of the flower of the double stock, which has neither of them, with as correct an idea of it, as we speak of the flower of a peach, which has both these, and also all the other parts which constitute a perfect flower. A perfect flower consists of four parts,—the calyx, the corolla, the stamina, and the stigma.

The *calyx* is the outer envelope of the flower, and derives its name from its resemblance to a cup, containing all the other parts of fructification, except the germen or ovary of superior flowers. The perianthemum is a true calyx: it is found, I believe, on the greater part of plants, and answers to the definition given above. It is generally green, like the leaves of the plant, but sometimes colored, as in the fuchsias. Where it consists of one piece only, it is called monophyllus; in which case, it is sometimes undivided, but commonly cleft into segments, sometimes so deeply as to cause a new beginner to mistake it for a polyphyllus calyx. Of polyphyllus calyxes, there are still a great variety, from the poppy, in which it consists of but two leaves, which fall as soon as the flower begins to develope itself, to the artichoke, in which a number of strong leaflets are disposed one over another, and die only with the stem that supports them. A calyx is called proper, when it contains only one flower, as is mostly the case; or common, when it contains many florets, as they are termed, from the aggregate or compound head of them, which constitutes a compound flower. These generally have no proper calyx, but are separated by scales of a chaffy substance ; but in Scabiòza, and a few other plants, each flower of the compound head is furnished with its proper calyx, and the whole head, with an *involucrum*

The *corolla* is the inner envelope which surrounds the other parts of the flower, except the calyx, and is generally of a very delicate texture, and beautifully painted; which circumstance accounts for the earlier botanists making this part the principle on which to found their respective systems, and for the regular idea of a flower still existing among all nations. A corolla is either monopetalous, united in one, or polypetalous, in several parts.

The *stamina* are the thread-like bodies which are found in most flowers, supporting small heads, or bags, which open when they are come to maturity, and discharge a powdery substance called pollen. A stamen consists commonly of two parts, the thread-shaped body, or filament, and the head or anther; but the latter only is essential, and is sometimes found without the filament to elevate it. The anthers are the knob-shaped bodies which contain the fecundating dust, and are either sessile, or supported by filaments. They consist of a membraneous capsula, most commonly divided into two cells, in which is contained the pollen. When the stigma is in a proper state for impregnation, the anthers burst, by means of a longitudinal cleft, and the pollen is discharged. The pollen is a subtle dust contained in the anther, which organ seems to be designated solely for its maturation, production and discharge.

The *stigma* is a small columnar body, generally situated in the centre of the flower, and in bisexual flowers, surrounded by the stamina. The ovary is the seed vessel in an incipient state, and forms the base of the pistillum. The style is a continuation of the ovary, in a more slender form, and serves to elevate the stigma, and, by its inflections in numerous instances, to adapt it the better to receive the pollen.

When a flower is furnished with any appendage, or multiplication of any of its parts, beyond what it has in its true natural state, such flower is considered a vegetable monster. This circumstance is supposed to arise principally from an excess of nutriment, and hence it is termed luxuriant. A double or full flower (flore pleno) is produced when not only all the stamens, but the pistil also, becomes corollaceous: this is exemplified in Cheiránthus and its natural allies, and in Ranúnculus, Ròsa, &c.; these rarely, with the exception of Ròsa, if ever, produce seed, the parts for that office being wholly transformed. An aggregate flower being composed of a number of florets closely set together (the flower of the common dandelion is a good example), has more the resemblance of a luxuriant flower than any other natural flower has. Yours, &c.,

J. W. Russell.

Mount Auburn, Cambridge, Aug. 7, 1835.

Art. VIII. *Successful Treatment of Oxalis tetraphylla.* By R.

About the first of July, I planted in a pot, scarcely covering them, the bulbs of this little flower, and watered them in a most profuse manner. Although, at the time of potting, there were no symptoms visible of renewed vegetation, yet, in three weeks, they had made strong and vigorous flower stems, finer indeed than I had ever seen before.

The bulbous Oxalideæ are generally natives of tropical countries, and are described by travellers as forming a part of the hybemal glories of those regions. Their growth is therefore periodical and rapid. During the dry season, which is most of the year, they remain in the ground in a desiccated and dormant state; but no sooner do the winter rains commence, than the former parched surface of the ground is suddenly covered with these joyous and delicate harbingers of a cooler season.

The Oxalis tetraphylla is a native of Mexico. Its roots are small scaly bulbs; leaves in fours; leaflets obcordate, emarginate, with a beautiful dark purple line on each, forming an exact square on the entire leaf; scape simple, many flowered; flowers violet colored.

This species, with O. Mauritiàna, are pretty æstival plants for border cultivation, and might be used as edgings to advantage, affording a profusion of flowers during the summer. The bulbs increase rapidly; but being tender, must be taken up and kept dry, and from frost during winter.

R.

Salem, July 28th.

ART. IX. *On the Sowing of several Varieties of Flower Seeds, for the Purpose of having them bloom much stronger and more profusely during the next Season.* By the CONDUCTORS.

As the season is now approaching in which much can be done towards beautifying the garden for the ensuing spring and summer, we would call the attention of our readers to the superior advantages to be gained by the immediate planting of several kinds of flower seeds, among which are some of the most showy and beautiful of which our gardens can boast. It is well known how much is gained by planting fruit and shrub seeds, and also many kinds of vegetables, in the fall of the year. With many sorts of flower seeds, equal advantages are derived, by pursuing nearly the same course of cultivation. Perhaps most of our readers have noticed what strength of growth, and what beautiful large flowers, many plants have, that are what is generally termed *self-sown:* but with double flowers, it generally happens, that they rarely if ever, when self-sown, come double the next season: the seeds should therefore be selected with great care, and placed away until wanted for sowing. The kinds which we think do well in this way are Calliópsis bicolor, Clárkia pulchélla, pulchélla *var.* álba, and élegans, larkspurs of all sorts, Eschschóltzia califórnica, cròcrea and canéscens, Ibèris, amàra, Collòmia grandiflòra and lineàris, Argemòne mexicàna, ochroleùca and Barclayàna, Ammòbium alàtum, Resèda odoràta, Verbèna Aublètia, Gilia capitàta, and several others may be tried; but these are particularly named, as kinds which should invariably be planted in the autumn, to flower profusely and beautifully.

About the latter part of September, or, if warm for the season, the middle of October, the places should be selected, where it is intended to plant the seeds; such as the Eschóltzia, and Argemône, should be sown where they are to remain the next season, as all the Papaveràceæ are much injured by removal. The other kinds may be sown in beds or in the border.

Make the ground fine and even, and sow the seeds in drills or small patches: upon the approach of frost, a small quantity of leaves, hay or straw should be thrown over the soil, to prevent the frost from penetrating too deep; as the seeds will vegetate sooner, and come forward more rapidly, than they would if this precaution was not taken: as early in the spring as possible, the covering should be removed, and when the young seedlings appear above the ground, they should be thinned out, and have a light hoeing: they will then grow strong, but not very fast, and will attain to a good height before those sown in the spring will be up; they may afterwards be treated as other annuals. There are many varieties which should be sown early this month, to flower in the parlor or green-house during winter, but we are obliged to omit any further remarks at this time.

Art. X. *Climate——The Morus Multicaulis and common White Mulberry.* By William Kenrick, Nurseryman, Nonantum Hill, Newton.

The silk-worms, and the plants whereon they most delight to feed, are the natives of China. These are the *common white mulberry*, and the new mulberry, or *Mòrus multicaùlis.* This last is also called, by way of excellence, the *Chinese mulberry*, all being alike the natives of the same climate and country.

The Mòrus multicaùlis is a tree of uncommonly rapid a growth: the leaves are large and pendulous, their length in dry and arid soil being six inches, and their breadth eight; but in a rich and humid soil, their dimensions are far greater, extraordinary specimens having measured more than a foot in breadth, and fifteen inches in length. They are invariably curled or convex on their upper surface: of a deep and beautiful shining green. A plant of the easiest culture by grafting, by layers, and by cuttings, but we are assured, by no other mode; This being a *variety.*

By these characteristics, the *true Mòrus multicaùlis* is distinguished, not only from the *Dandolo mulberry*, but also from another variety, which has been mistaken for this, and which I saw growing at the place of Mr. Whitmarsh, in Northampton, the seeds of which came from China. At first sight, I concluded they were the *Morettiana* or *Dandolo*, a new species from Padua, which, like these, has a large leaf, with a *plain surface*, but on examination, I saw they differed as much from this as they differ from the true kind.

Since the introduction of the Mòrus multicaúlis to New England, which was not till 1830 or '31, this tree has had to contend, even in its very infancy, with two winters, such as were never before recorded in the memory of man, or in the annals of our country,—winters doubly severe, and with two-fold power to kill. Such destructive winters as these were none of ours, but the visitations of centuries,—the visitants of other countries, and climates, and latitudes, to which alone they properly belong,—the winters of Canada and of Lapland, of Russia and of Nova Zembla.

The proper soil for the mulberry is *dry*, *sandy* or *stony*; on such soils, the leaves are less crude and watery, and of better quality, and the wood acquires a ligneous consistence, and fully matures in due season. And trees growing in such soils, and situated on the open plains, and on hills the most exposed to cold winds, are found to suffer least of all from the destructive frosts of autumn and of winter.

I distinguish between trees growing in a state of nature, and those growing in a state of *artificial culture.* Beneath the shades of the forest, or of herbage, and in a *state of nature*, the growth of the young tree is indeed slow, but the young plant finishes its growth for the first year, and attains to a ligneous consistence, and the wood becomes mature, in *due season*; while in a rich, humid, and highly cultivated soil, and protected situation, the growth of the young tree is prolonged to a very late period, or until suddenly arrested by the frost; and the immature wood of a forced growth being tender, it requires, and more especially *during the first winter*, that essentially necessary protection at the *surface of the earth*, which nature always provides, if left to herself. For it is an important and established fact,—that the destruction of delicate trees and plants by the winter, is caused by the alternate freezing and thawing of the earth at the *surface*,—that death commences at the *surface*, and the top dies *as a consequence*,—which a little grass or litter at the root will prevent.

In our climate, and in a *state of cultivation*, the young seedling trees, of the plum, and cherry, and pear, and quince, and many other species, always require protection during the first winter, though they may never require it afterwards: all these, therefore, are either taken up in autumn and *laid in*, or otherwise secured; or they are protected at the root where they stand, by a slight covering at the surface. This is also true of the *white mulberry*, which always requires protection during the first winter, and is equally true of the young plants of the *Mòrus multicaúlis*, so valuable, the layers of but a single summer's growth which are separated in the autumn.

Even some of the hardiest trees of the woods, of a *forced growth*, require, in our climate, protection during the first winter, in a state of cultivation *so opposed to nature*; they *find not, in a highly cultivated and naked soil*, that essentially necessary protection and shelter, of moss, or grass, or leaves, which they always find in their own native forests.

On the northern declivity of Nonantum Hill, and in the bleakest position, I left exposed, last autumn, the young trees of the *Mòrus multicaúlis;* the tops with no protection; nature's covering of herbage, the only defence at the roots; thus situated, they have borne the winter well.

During the present summer, at the mansion of the Hon. J. F. Wingate, in Windsor, Maine, near the river Kennebec, and between the latitudes of 44° and 45°, I saw the Mòrus multicaúlis—young trees, which were planted near the summit of a vast and gently rising ground. Nature's covering, of dried herbage, alone protected them at the roots; the tops, exposed, had borne the extreme cold of last winter surprisingly well.

At Walpole, in New Hampshire, and at the farm of P. Mason, Esq., are the trees of the Mòrus multicaúlis which have borne, unprotected and uninjured, the rigors of the three last winters.

I saw, also, during this summer, at the residence of S. V. S. Wilder, Esq., in Bolton, Mass., in a cold and moist soil, and bleak and northerly exposition, the trees of the Mòrus multicaúlis, which had, unprotected, borne the two last winters well.

Also I saw, during July of the same summer, at Northampton, and at the place of Mr. Whitmarsh, the trees of this same mulberry of four years old, which had also endured, with no protection, the extreme severity of last winter.

It is well worthy of remark, that in the immediate neighborhood of every place which I have named, except the first mentioned, the thermometer had descended from 30° to 40° below zero, during the coldest days of last winter; while in Mansfield, Connecticut, and elsewhere, even large trees of the *common white mulberry*, have, during the last winter, suffered badly, or been killed outright.

Mr. Lyman, of Manchester, adjoining Hartford, in the same State, has cultivated the Mòrus multicaúlis for four years, and has never protected them at all. On him, also, I called, during the present summer, where I saw the Mòrus multicaúlis in a flourishing state,—plants of four or five years of age, uninjured in a naked and unprotected soil. He had, indeed, during last winter, lost many young trees of this mulberry, *forced trees, of but a single summer's growth, in a bare and unprotected soil*; these were all he had ever lost. This same winter which had destroyed these, and yet *spared all the Mòrus multicaúlis* of an older growth, and of former years, destroyed also to the root, a whole nursery of cherry trees, three years old, which stood beside them.

Mr. Davenport, of Colerain, Mass., is an experienced cultivator of this tree: to him I have just written, but my letter has not yet found him. He is now in Connecticut, and has just stated to Mr. Bestor, that his Mòrus multicaúlis, unprotected, had endured the late severe winter uninjured, all being planted in a suitable soil. Both alike commend soils of but moderate fertility,—a dry soil, on a friable subsoil, on moderate elevations and gentle declivities; these being the soils and situations which all authors agree are most suitable for the mulberry from China.

At Hartford, and at the Messrs. Comstocks, the trees are now growing which they purchased of Mr. Bestor; these had borne the last winter well, though unprotected. These gentlemen are the editors of the "*Silk Culturist & Farmer's Manual*," and are the sources of intelligence; and their faith in this tree is firm and unwavering. See their excellent monthly periodical.

WILLIAM KENRICK.

Nonantum Hill, Newton, Aug. 20, 1835.

We are highly gratified in presenting our readers with a communication from our esteemed friend, Mr. Kenrick; and we are still more gratified, that it is upon a subject which, at the present moment, is engrossing public attention,—one not only of great importance to the horticulturist, as well as the agriculturist,—one not only of vital interest to every individual, but one touching the prosperity, the resources, and the future happiness of our country. When we view the rapid progress which the cultivation of the mulberry, the rearing of the silk-worm, and the manufacture of various silk goods, has made within a few years—or we might say within a few months—it must be apparent to every observer, and more particularly to all who have read and informed themselves upon the subject, that it will one day, be one of the greatest sources of income to the agricultural portion of our country. That it has not progressed more rapidly, is a matter of astonishment to us; yet, when we consider that it is only by diffusing correct and valuable information, that public attention can be awakened to a subject of great importance, and when we reflect that, in regard to raising of the mulberry and the rearing of silk-worms, so little has been written, until lately, it may not

perhaps appear quite so slow in its advancement as would be naturally inferred. But the time has now come, when information, and such, too, as is wanted, can be easily acquired,—information which we hope will dispel the opinion which many entertain, that the cultivation of the mulberry, the rearing of silk-worms, and the manufacture of silk, is visionary or problematical. "It is information," said a committee of the Massachusetts legislature, in a report made a few years since, on the expediency of encouraging the growth of the mulberry tree, and the culture of silk, "which is the foundation of agriculture, as well as other arts."

We have been led to these remarks, which we might extend to pages, though perhaps not immediately connected with the following observations, from the zeal which we feel to diffuse all the knowledge in our power, upon this important subject: if it was in the province of our Magazine to treat upon agriculture, nothing would give us more delight than the thought that we were advancing this very important branch of domestic industry.

The above communication, by Mr. Kenrick, we hope will call more attention to the much discussed question,—whether the Chinese mulberry will stand the rigors of our New England winters, so as to warrant its general cultivation. Within the past year, this has been under agitation, among the agricultural and other papers; but no definite conclusion, as yet, has been arrived at. Every year's experience will add to confirm or vanish the hope, that it may ultimately be extensively cultivated.

The remarks by Mr. Kenrick, we infer, were, in part, called out by a paragraph in our last (p. 310), stating, that in the vicinity of Hartford, where a large number of the Chinese mulberry are cultivated, they were mostly destroyed by the severity of the past winter: this information we received from gentlemen on whom we could place the most implicit confidence in their statements; and, as conductors of a work disseminated among a large number of individuals, in nearly every State, we thought it our duty to give publicity to the fact; not that we would wish, in the least, to discourage the planting of this valuable variety, but that those who were about setting out mulberry orchards, and more particularly of the Chinese, would look into the subject, that, should their plantations be destroyed, they could not say they were not prepared for such a calamity. Far be it from us to retard, in any way, the general cultivation of this kind; but we would have all interested know what may be possibly expected, and to guard themselves against any loss.

It would not be possible for us, at this time, to go into an examination of the climate in various parts of our country. The facts brought forward by Mr. Kenrick, to prove the hardiness of the Chinese mulberry, have great weight, but not, in our mind, sufficient to change the opinion we have formed,—that this variety *cannot* be relied upon exclusively, in any of our States, Florida excepted. To substantiate this, without extending our remarks to a great length, we will state a few facts.

In speaking of the "climate and soil of New England," Judge Comstock, the editor of the Silk Culturist, says, "the white mulberry will grow luxuriantly in all parts of the United States, and so far as its foliage is depended upon for the subsistence of the worm, the material advantages of all the States are equal. But with respect to the Chinese mulberry, it cannot be cultivated in the Northern States without *much* additional labor and expense;" and further, "at the south, no extra care or precaution is indispensible to its propagation." This, however, does not agree with the statements of a correspondent in a previous number, dated from Georgia. From this we extract the following: "The *Mòrus álba*, or white mulberry, seems as yet to be the *only* kind to which we may look with a *certain* prospect of a crop. The Mòrus multicaúlis, or Chinese mulberry, has been looked to with considerable interest, as being *peculiarly* adapted to the Southern States; but I fear that fond anticipation *is about to be blasted,* from the *fate* which it has met with during the intense severity of last winter;" and again he states, "there is one advantage which the Mòrus álba possesses over every other [kind], which I consider a matter of some importance, that is, the quantity of fruit it produces, which is said to be fine food for hogs, and of which they are very fond."

This is but one instance, at the south, that we have read of, though there may be others; but it proves volumes that the Chinese variety *cannot* be depended upon, even as far south, and under the genial climate of Georgia. We will suppose, for one moment, that an individual in Georgia had a million of silk-worm eggs, and that he depended upon the Chinese mulberry for food; that they are placed away securely, until the time for hatching, in the ensuing spring. But, in our very uncertain climate, the hopes as well as the fortunes of the husbandman, are too often blasted. Secure as even the southerner may feel, unheeding any danger, it often comes, and when least expected, with the greatest force. The spring opens, but his plantation of trees show no signs of vegetation; the eggs have hatched, but he has no food for the worms; his hopes of a rich harvest have vanished, and he gives up with despondency the growing of the mulberry, or the rearing of the silk-worm, turning his attention to something to which he is less liable to lose the earnings of his toil and labor: this will consequently induce others to do the same; and the effect will be to materially injure, if not to cause the total abandonment of this profitable pursuit.

We might multiply cases where the effects of the cold have been the same; but, with the exception of one or two others, we shall close these remarks. Another correspondent in the Silk Culturist states as follows: "There appears to be no difference of opinion, with regard to the superior utility, in every respect, of the Chinese over the Italian [or white mulberry], when climate is equally adapted to both; but there is *so decided* a difference of opinion among those who have tried the culture of the Chinese tree in this State [Hartford], that the public must, for the present, remain in *some doubt* whether the certainty of its living through our winter is sufficiently established to warrant *exclusive* dependence upon it. One of my friends transplanted *several thousand* trees, and in *three winters* lost them *all,* although they were placed on *different kinds of soil,* and *in different exposures.* Another friend planted *eight hundred,* and lost all but one hundred and thirty; and that one hundred and thirty I took and planted in different places, seventy-five in *one spot,* and the remaining fifty-five in *another.* The former *all* died; of the latter, about *one* in *five* lived, but were very much injured."

Judge Buel states, in his most valuable agricultural work, and one which should be in the hands of every real farmer, that "*our experience compels* us to say that its success [the Chinese variety], in the northern section of the State [New York], is at least *doubtful.*"

We need not add to these, as in our mind, although we confess we have had no experience, the Chinese mulberry *cannot,* for the present, be relied upon. It was no more than this that we intimated in our last: that plantations should be made of the Chinese, wherever there is one of the common white, we most earnestly recommend; and we ardently hope that it will ultimately be acclimated; but, at the same time, we must express our doubts. To select a few individual trees, that have stood the severity of our winters, is not a fair comparison with a whole plantation; for it must not be expected that the same care will be taken of the many, which would be naturally given to a few trees. As regards the common white mulberry, we have no doubt but the young seedlings are often injured in severe winters; but the proportion to the whole number grown is so small, that it is not worth naming. If they had been hurt to any extent, we should not enumerate at least *two millions* of trees now growing in New England alone.

The white mulberry is the kind grown by the Italians. We *know* that it is *perfectly hardy* in our climate; we know that the silk-worms eat it freely; we know that the silk of the Italians is rich, beautiful and glossy; we know that it can be increased by thousands by the seed; we know that the trees make good hedges, and, when planted out at proper distances, if not wanted to feed the silk-worm, they afford the most durable timber for artisan purposes. Mr. Cobb, who agrees with us in our opinion, in his excellent Manual, states, that "everything is useful in the mulberry tree."

We would, with Mr. Kenrick, recommend to every one interested in the cultivation of mulberry trees or the manufacture of silk, the Silk Culturist, published at Hartford. We have no hesitation in saying it is by far the best work published in the country. It originated where more is known in regard to the subject than in any other State; and its pages are enriched with excellent original communications from many individuals who have made the silk culture their study for several years.

We shall be glad to receive any papers in regard to the Chinese mulberry, and, if possible, will give them a full insertion. At a more favorable time, we shall endeavor to extend these observations, more particularly in regard to the climate of our country.—*Conds.*

Art. XI. *Notices of new and beautiful Plants figured in the London Floricultural and Botanical Magazines; with some Account of those which it would be desirable to introduce into our Gardens.*

Edwards's Botanical Register, or Ornamental Flower Garden and Shrubbery. Each number containing eight figures of Plants and Shrubs. In monthly numbers, 4*s.* colored, 3*s.* plain. Edited by John Lindley, Ph. D., F. R. S., L. S., and G. S., Professor of Botany in the University of London.

Curtis's Botanical Magazine, or Flower Garden Displayed, containing eight plates. In monthly numbers, 3*s.* 6*d.* colored, 3*s.* plain. Edited by William Jackson Hooker, L. L. D., F. R. A., and L. S., Regius Professor of Botany in the University of Glasgow.

DICOTYLEDONOUS, POLYPETALOUS PLANTS.

XXXII. *Ternströmiàceæ.*

Camèllia japónica, *var.* Chandlèrii, is figured in Paxton's Magazine of Botany for May. The following remarks are appended: "The flowers, as will be seen by our figure [one variegated, and one entirely red], are subject to sport a great deal, sometimes producing flowers variegated, and very beautiful; at other times, of a rich plain red, without any mark of white to be seen. The plant from which our drawing was taken, produced only one variegated flower, which, happening to be the first, we sent it to the engraver's; but the remaining flowers opening all plain red, we were induced to add one of the red flowers." The same case occurred with a plant in a gentleman's collection in our vicinity, with this exception,—that, one season, the whole of the flowers on the plant were splendidly spotted and variegated, and the following year, *all* were red, without the least tinge of white. It will often happen, and the purchaser of rare plants must not be disappointed, if they do not prove to be the same the first or second season of their flowering, that they were bought for: sometimes owing to peculiar management, and sometimes from other circumstances, they will not at first equal the expectations formed of their splendor.

In our last, (p. 307,) we stated that seven new varieties had been raised in the garden of W. F. Campbell, Esq., M. P., Newhall, Lancashire. The following description of them is given in the Floricultural Cabinet for May.

"1. *Caméllia japónica*, var. *Hendersòni*, HENDERSON's hybrid. A seedling from the double striped; a large and very beautifully formed rose-colored flower, named in honor of the late Mr. WALTER HENDERSON, who was gardener to W. F. CAMPBELL, ESQ. This flower gained the silver medal, awarded by the Caledonian Horticultural Society in May, 1834, for the best seedling camellia raised in Scotland.

2. *C. j.*, var. *heteropétela, álba.* A seedling from Middlemasts's blush. A very large *pure white* flower, the form of its parent, but nearly double the size.

3. *C. j.*, var. *Campbélli*, CAMPBELL's hybrid. A seedling from Middlemast's blush. The flowers are very large, of a fine white, striped and spotted with pale red. A very handsome and showy flower.

4. *C. j.*, *venústum*, Lady ELEANOR CAMPBELL's hybrid. A seedling from Middlemast's blush. A most beautiful red flower, the centre petals being occasionally mottled with white.

5. *C. j.*, *Adelàidii*, Miss ADELAIDE CAMPBELL's hybrid. A seedling from the red warattah. A splendid rose-colored flower, after the form of the *var.* Chandlèrii.

6. *C. j.*, var. *Juliànii*, Miss JULIA CAMPBELL's hybrid. A seedling from Middlemast's blush. A finely formed and very beautiful flower; the flowers are white, sometimes having a delicate red stripe up the centre of each petal.

7. *C. j.*, var. *heteropétela rùbra.* A seedling from the red warattah. A very handsome flower, being far superior to the parent kind; it bloomed this season (1835) for the first time.

8. *C. j.*, var. *Carswelliàna*, Carswell's hybrid. A seedling from the semi-double red. A very fine, regular formed flower, of a deep-red color, beautifully striped with white."

Two new varieties, named Caméllia japónica, *var.* Allnútta álba, and Allnútta supérba, have been exhibited before the London Horticultural Society the past spring; they were raised by John Allnutt, Esq.

XXXVIII. *Saxifràgeæ.*

SAXIFRAGA.

ligulàta. ***Wall.*** **Fringe-leaved saxifrage; a green-house plant; growing about a foot in height; flowers white, tinged with pink, appearing in January and February. Propagated like the other species. Bot. Mag., t. 3406.**

A splendid species of the genus Saxifràga, introduced from Nepal, by Dr. Wallich. It was anticipated that from that country it would stand the winters of Britain; but "the great fickleness of our climate, at the early season of its blossoming, (January and February) render it desirable that it should be treated as a hardy green-house plant, or the inmate of a cool frame." (*Bot. Mag.*, May). Perhaps it would stand our winters unprotected. Several of the Nepal plants, among which are some of the potentillas, will not live through the winter in the English gardens, although they will in ours unprotected: this is owing to the humidity of their climate, and the extreme moisture of the soil. We have no doubt but this species would live through our winters.

XLVII. *Onagràreæ.*

Fùchsia globòsa is figured in Paxton's Magazine of Botany for May. It is a splendid species. All the fuchias flower well, if planted out in the open border. We have seen this species superbly in bloom at Belmont Place, Watertown, the residence of J. P. Cushing, Esq.

LXXVII. *Leguminòseæ.*

ACACIA.

prénsans. ***Lowe.*** **Prickly feathered Acacia; a green-house climbing shrub; flowers red and yellow. Propagated like the other species. Bot. Mag., t. 3408.**

"A most elegant and lovely shrub; but a dangerous neighbor to other plants within its reach, and requiring much space for its display." This is stated in the description to be an extremely interesting plant; the foliage is a bright green, feathery and graceful. The flowers, according to the plate, appear in dense terminal panicles, of a globular shape, at first of a purplish red, and, as they open, the bright yellow stamens form a beautiful contrast with the other red parts. "The native country of this acacia must remain uncertain: a single tree of it has long existed in the garden of the Valle, near Funchal; but I can learn nothing of the exact date of its introduction or of its origin." (*Bot. Mag.*, May.)

OROBUS.

atropurpùreus *Desf.* **Dark purple Orobus. A hardy, perennial plant; color of the flowers dark purple; flowering in May; cultivated, we presume, by seeds; a native of Algiers. Bot. Reg., t. 1763.**

This is the handsomest of all the species of the Orobus we have seen figured: several of them are not worth cultivating. The flowers are disposed in dense racemes, on axillary peduncles, and number from twenty to thirty florets. It is "a native of wild places near Algiers, where it was first noticed by Desfontaines." The drawing was made from plants growing in the London Horticultural Society's garden at Chiswick. (*Bot. Reg.* May.)

ANTHYLLIS.

Webbiàna *Hook.* **Rose-colored kidney-vetch. A hardy perennial, growing about a foot in height; color of the flowers rosy red; flowering in the summer; a native of Teneriffe. Sweet's Fl. Gard., t. 292.**

A pretty plant, but, like the Orobuses, rather a botanical than a floricultural gem. This species is a native of the Peak of Teneriffe, and was introduced to the English gardens "three years ago, by Mr. Webb, after whom the species has been named." It is interesting on one account, as it will "thrive in dry, light, sandy soil, and is well suited to ornament rock work." (*Sweet's Fl. Gard.*, June.)

XCVI. *Rhámneæ.*

CEANOTHUS.

azùreus Azure-flowered Ceanothus; a green-house plant, growing six to ten feet high; flowers azure blue; propagated by cuttings of the young wood; introduced in 1818. Pax. Mag. Bot., t. 74.

"Scarcely any of the species of the genus are worth cultivating, where a selection for beauty are wanted. The present subject, however, is an exception: though the flowers are small, the figure of the plant, when well grown, is graceful, and the panicles of flowers are beautiful." (*Pax. Mag. Bot.*, May.)

CXXIV. *Tropæòleæ.*

Tropæolum peregrinum. We saw this flowering at Mr. Buist's, Philadelphia, and mentioned it at page 204, as T. pentaphyllum. We did not observe the error until too late for correction: T. peregrínum is botanically distinct from T. pentaphyllum, which is now Chymocárpus pentaphyllus, as made the type of a new genus by Mr. D. Don. The flower bears but little resemblance to T. peregrínum. We have now before us P. pentaphyllum in flower: is one of the most singular, as well as one of the most delicate climbers we have ever seen. The specimens are from the garden of the Misses Sumner, Dorchester, who successfully cultivate a choice collection of flowers.

CLVII. *Begoniàceæ.*

BEGONIA.

petaloìdes *Lindl.* Petaled Begonia. A stove plant; flowers rosy red and white; introduced in 1835. Bot. Reg., t. 1757.

"A pretty little species," though the genus is not much appreciated by our amateurs and gardeners. "One of the prettiest things in the garden of Schonbrun, is a Begonia house, filled with this genus, and ferns growing upon decayed wood and old tan." The flowers are small, on long peduncles, in number two or three, elevated above the foliage. This species is "peculiarly instructive" to botanists, as it confirms the true character of the order Begoniàceæ. (*Bot. Mag.*, May.)

DYCOTYLEDONOUS, MONOPETALOUS PLANTS.

CLXX. *Ericàceæ.*

RHODODENDRON.

nudiflòrum; *var.* eximium *D. Don.* Choice Rosebay; a hardy evergreen shrub; flowers crimson, with dark spots; appearing in May; propagated like the other varieties. Sweet's Fl. Gard., t. 291.

Another magnificent hybrid, between our native Rhododéndron (Azàlea), nudiflòrum *var.* coccinea màjor, and the R. arbòreum, the former fertilized with the latter, raised by that most successful cultivator, Mr. William Smith, now at Norbiton Common, near Kingston. Mr. Smith has enriched our gardens with hybrids of the Rhododéndron, which surpass in splendor any of our indigenous species. The present plant must be a very desirable variety: with all the hardness of the nudiflòra, it combines the brilliancy of the flower of R. arbòreum. The foliage is evergreen; the flowers are disposed in corymbs, from ten to twelve in each; easily increased by layers. (*Sweet's Fl. Gard.*, June.)

Azàlea índica hybrida (raised from seeds of A. phœnícea, imprègnated with A. ledifòlia,) has been raised by the Messrs. Young, of the Epsom Nursery, and exhibited at the London Horticultural Society.

CLXXI. *Epacrìdeæ.*

EPACRIS.

impréssa *Labill.* Foveolated Epacris. A green-house shrub; flowers, rose-colored; appearing in February and March; propagated by cuttings; introduced in 1825. .Bot. Mag., t. 3407.

A graceful species, of the lovely genus Epácris: the E. grandiflòra is well known as one of the most elegant greenhouse shrubs we possess. E. impréssa is scarcely less interesting: the flowers are of a deep rich rosy-pink color, gracefully pendulous, and disposed in terminal spikes. The leaves are more scattered, narrower, of a deeper green, than E. grandiflòra, and end in a sharp, almost spinous point. It is a native of the south coast of New Holland, and of Van Dieman's Land, and was introduced by the Messrs. Mackay, of Clapton. (*Bot. Mag.*, May.)

CXCI. *Caprifoliàceæ.*

CAPRIFOLIUM.
hispidulum *Lindl.* Bristly Honeysuckle; a hardy shrub; grows from two to three feet high; flowering in July; color of the flowers rosy; a native of north-west America. Bot. Reg., t. 1761.

This is another of the rare and beautiful shrubs, discovered by the lamented Douglas, in the woods of north-west America. It is a desirable addition to the honeysuckles, from all of which it differs, and is without scarcely any fragrance. "It will not readily grow more than two or three feet high," and prefers lying prostrate to twining round other plants. In the English gardens, "in common soil, it can scarcely be kept alive; but in peat, and loam, it grows as readily as any other hardy American plant." The flowers are terminal, in glomerate heads, from seven to ten each; the leaves are cordate, ovate, nearly sessile, glaucous underneath; but of a bright green on the surface. The drawing was made from a plant growing in the Horticultural Society's garden at Chiswick. (*Bot. Reg.* May).

CXCV. *Asclepiàdeæ.*

PHYSIANTHUS;
àlbens *Martius.* White Bladderbloom; a climbing green-house plant; flowers white; propagated by cuttings; a native of Mexico. Bot. Reg. t. 1759.

A handsome species of this scarcely known genus, with our gardeners: the plant is a rapid climber, with opposite, cordate, acute leaves; flowers campaulate, in cymes, of two or three each, which appear singly at every joint; color white, with lines of pink; "easily propagated by cuttings." (*Bot. Reg.*, May).

CCXIV. *Acanthàceæ.*

GOLDFUSSIA. (In honor of Dr Golfuss, Prof. of Nat. Hist. at Bonn, on the Rhine).
anisophylla *Nees.* Unequal-leaved Goldfussia. A stove plant; growing two feet high; flowers purplish-blue, veined with pale marks of the same color; appearing in spring and summer; a native of Silhet, in India. Bot. Mag., t. 3404.

Nearly allied to some of the species of Ruéllia, to which genus it was referred by Dr. Wallich, through whom it was introduced to European gardens. The leaves are oblong, cordate-acuminate, and serrated; the flowers mostly solitary, on axillary peduncles which are partially "concealed by the distichous foliage;" a very desirable plant. (*Bot. Mag.* May.)

CCXXI. *Labiàteæ.*

CHILODIA.
scutellarioides *Brown.* Scutellaria-like Chilodia. A green-house shrub; growing two or three feet high; flowers, violet blue, appearing at various seasons; introduced in 1828; a native of New South Wales. Bot. Mag., t. 3405.

This is stated by Dr. Hooker, as "an interesting acquisition to our [green-house] collections." It is a shrub with numerous upright slender branches, which are opposite; leaves opposite linear-lanceolate, acute, dark green above and whitish underneath; flowers solitary on short axillary peduncles; the flowers of this species are somewhat like the Scutellària vulgàris, from which it takes its name. (*Bot. Mag.*, May).

MONOCOTYLEDONOUS PLANTS.

CCXXVIX. *Irideæ.*

GLADIOLUS.

natalénsis (G. psittacinus *Hooker*, in Bot. Mag., t. 3032; G. psittacinus *Lindley*, in Bot. Register, t. 1442). Natal Gladiolus. A hardy bulbous plant, growing three feet high; flowers yellow, spotted, striped, and shaded with vermillion and green; appearing in August and September; introduced in 1830 to Britain, and about 1832 to this country; propagated by offsetts in rich, sandy loam. Sweet's Flow. Gard., 281.

We have figured this splendid species at page 54, accompanied with a valuable communication on its management, from Mr. Sweetser. We notice it now to make known more particularly its native place, and the better understanding of its specific name. It is stated to be "a native of the banks of Natal river, which falls into the Indian ocean in about 29° 30′ south latitude, and which constitutes the northern boundary of a country (now forming part of the Cape colony) of the same name, on the south-east coast of Caffraria, and so called by the Portuguese navigators, who discovered it on Christmas day [the birth or natal day of Christ], in the year 1498." (*Sweet's Flow. Gard.*, April.)

ART. XII. *Calls at Gardens and Nurseries.*

We have made our calls, during the last month, at several places, and have been highly gratified to find a much increased taste in horticulture and floriculture. Improvements and alterations are being made, evidently evincing the rapid progress of this pursuit.

Mount Monataquot, Braintree—Farm of B. V. French, Esq.—Aug. 14th.—It is with great pleasure that we are enabled to present our readers with a few remarks on the farm of Mr. French: he is well known among our horticultural friends as an ardent admirer of good fruits; and he has been at much expense and trouble, to collect together all the finest kinds that are to be found in the numerous catalogues of our nurserymen. But part of them have as yet borne but little fruit, they having mostly been planted within the past five or six years. Mr. French's farm contains about sixty acres. It is situated on the Monataquot river, near the centre of this ancient town, and commands a beautiful view of the surrounding country. The house stands upon the highest part of the ground, called Mount Monataquot, and opposite to this the river, from the erection of a dam below, is widened, so as to give a much more interesting effect to the scenery. Between the house and the river, and on the gentle southern declivity, is situated one of Mr. French's orchards. The soil on the greater part of the farm, is of a strong, loamy nature, rather free from stones, and is well adapted to the growth of most kinds of fruit trees, particularly the pear and apple. In the garden attached to, and in the rear of, the house, are planted several fine varieties of pears; and among others in full bearing, we noticed the Seckel, Cushing, Wilkinson, &c. Passing through this garden, Mr. French pointed out to us three or four trees, in the centre of several rows, which were in a sickly state, and which was caused by the severe winter of 1833: the others were not injured in the least: the cause he ascribes to the situation of the land, which is rather springy; and being a little lower than the other part of the orchard, all the water from the adjacent higher ground flowed directly through this. Being thus continually inundated with water, the effects of the frost were doubly severe. This shows the importance of planting orchards on a good and porous subsoil. It is almost impossible to guard against the cold of some of our winters unless this is attended to. In another part of the farm, and at some distance from the house, Mr. French has an orchard of six acres, planted with apple and pear trees, not but a few of which, are, however, in bearing. They were set out in the spring of 1831, and look uncommonly strong and vigorous. The trees are dug round three times every season, and in the fall of the year, they each receive a barrow full of manure. We noticed in bearing, among the apples, the red and white Astracan, Alexander, Downton pippin, Jericho, Ribston pippin, and several others. The red and white Astracan are beautiful, and are fine varieties: of pears in bearing, there was but very few. Many of the kinds will prove synonymous, and several have been obtained under wrong names; on other parts of the farm, there are several kinds of pears in bearing, but we were deprived of the opportunity of obtaining their names: several are new and superior sorts. We hope, at another time, to give a more detailed account, of this, as well as some other farms, where there are fine collections of fruit trees.

Hawthorn Grove, Dorchester—M. P. Wilder, Esq.—Aug. 20.—We have but just had time to walk hastily through Mr. Wilder's grounds. The dahlias are now making a magnificent display: they have flowered uncommonly well with Mr. Wilder, this season: last, they flowered very indifferently: the cause of this is not easily accounted for: they were placed in the same situations last year that they were this, and were otherwise treated in the same manner. We cannot ourselves, solve the reason why dahlias flower so abundantly in some gardens, and so poorly in others: some of the new kinds which have flowered this season, and which are beautiful, are Goldfinch, red and yellow striped, Queen Sheba, rosy, with tinted edge of a darker red, Countess de Ponza, white, yellow, and lilac, excellent shape, and very superb flower; Granta, dark claret, Gordon's Lady Granville, dove color, &c. &c. Mr. Wilder has a plant of the striped Housainee melon, which now has on a fruit eight or ten inches in length; we hope he will succeed in ripening it; of all the Persian melons, this is said to be the finest. The camellias look in fine health.

Broomley Vale, Roxbury—Hon. John Lowell.—This place is too well known to most of our readers, to need any description from us: it is one of the oldest, as well as one of the finest in our vicinity. The labors of Mr. Lowell have long been appreciated by the agricultural portion of our community, and his devotion to the pursuit of horticulture has been no less constant, nor less valued by the lovers of this science. It is to him that we are indebted for the introduction of many of our most esteemed fruits; and through his exertions they have been widely and extensively disseminated. Had the study of agriculture and horticulture, in all its branches, been as zealously pursued by many individuals, its progress and improvement would have been surprisingly great.

In Mr. Lowell's grapery, there is a fine crop of fruit: the bunches are not of that monstrous size, which many growers often try to produce, regardless of flavor or color, but are handsomely shaped, and probably the average weight of the whole, will be greater than if the clusters were large, and few in number. Mr. Lowell prefers flavor and quality, rather than size and beauty. We have too often expressed our opinion, of the practice of overbearing all kinds of fruit trees, vines, &c., to need repetition at this time; and we are happy, that, in this respect, we coincide with the opinion of so experienced a cultivator. Mr. Lowell stated to us, that he never failed to have a good crop. In the green-house, Mr. Lowell is trying the experiment, of inarching off the young wood of camellias, as practised by the English gardeners: we have no doubt of his success. He pointed out to us an inarching of the young wood of two grape vines, which was made this spring: it had made a strong growth six or eight feet in length, and is ripening finely. We here observed an extremely vigorous plant of the Ipomæa insígnis, in beautiful bloom: it was received from the Hon. and Rev. Wm. Herbert. From the axil of every leaf arises a panicle of flowers, from one to three of which are open every morning, but close at noon; they are of a rich, purplish red. Zephryánthes ròsea (formerly Amaryllis) was flowering profusely. In the hot-house, Asclèpias curassávica, Gloxínia speciòsa, and a plant of Cyrtánthus oblíqua, with a spathe of flowers two feet high, were elegantly in bloom. Mr. Lowell showed us plants of Gloxínia maculàta, which he has not yet flowered. In a pit in this department, there are some fine healthy looking pine-apple plants: they are about of the right size for a succession pit. We are anxious to see this "king of fruits" extensively grown in gentlemen's gardens, in this vicinity.

In the garden, we observed some rare specimens of various plants: Cánna speciòsa, turned out in the border front of the green-house, has made shoots ten feet high, producing terminal spikes of flowers, which have a gorgeous appearance; Gomphocárpus arboréscens, one of the Asclepiàdeæ upwards of ten feet high, and covered with bunches of elegant white flowers; a species of Cássia (supposed bicapsulàris), with brilliant yellow flowers, made a showy appearance. We also saw a fine plant of Poinsiàna pulchérrima (pride of Barbadoes), which was raised from seed last season: it has not yet bloomed; the foliage is charmingly graceful, and the flower is said to be grand. Erythrína pícta has been in flower nearly all summer: its spikes of coral-colored blossoms, are the showiest ornaments of the garden: we are astonished that this, together with Crísta-gálli, and herbàcea, a South Carolina species, is not oftener found in our collections.

There were many other things deserving of mention; but we omit them till another opportunity. One plant, however, we would not forget: this is the Nelúmbium speciòsum, that famous lily of the oriental waters. Mr. Lowell informed us that he had sowed some of the seed for several successive years, and had as successively lost the plants. This year, he has been more successful; so much so, that we have no doubt but that those who have long wished for a sight of this Egyptian beauty, will soon be gratified. The plant is now in a large tub, and has thrown up leaves, with stems three feet in height: these are worth seeing, of themselves, without the flower. The plant is growing vigorously, and we should not wonder if it flowered in the course of the fall. Mr. Lowell is not certain whether it is the white or blush variety, having received seeds from Dr. Wallich, of both. The white has not yet flowered in Britain.

Brooklyn—Hon. T. H. Perkins,—This place is in high keeping: we never saw the grapes and peaches in the houses look better. The crop is very large, and the fruit is well colored, and of excellent flavor. Mr. Cowan has completely routed all the insects, and the vines and peaches present one mass of green, healthy and luxuriant foliage. The grapes in the green-house have been mostly cut; as have also those in one of the old forcing houses. Those in the compartment heated by Perkins's hot water system, are ripening finely, and acquiring a good color. We were astonished, when Mr. Cowan assured us that he cut away *three* bunches out of *four*, and that the whole number, thus thinned out, amounted to upwards of *three thousand clusters*. This accounts for his fine crop, and the excellent size of the fruit: by such judicious management, there is no fear of plenty of fruit every season. None of the peaches are yet ripe in the new range. In the old forcing houses, some of the trees are literally loaded, too much so, we think, for the strength of the trees. We tasted some of the fruit, and found it to be of excellent flavor, particularly the Broomfield and Murray's nectarines: the former is a showy and beautiful kind. We think we never have eaten forced peaches so well ripened. Mr. Cowan had been thinning away the leaves, to let the sun to the fruit.

In the garden, the annual and other flowers are blooming profusely. The dahlias do not flourish very well: they have that peculiar appearance which most of them do that have come under our observation; a few very fine flowers were open. We anticipated a walk through the grounds, but were prevented, from the lateness of the afternoon.

Country Residence of T. Lee, Esq.—This beautiful place is situated near Jamaica Pond, and is nearly thirty acres in extent. The lawn of several acres, in front of the house, is the finest we have ever seen. Mr. Lee is a great lover of our indigenous trees, shrubs and plants, and has collected together a great number of species and varieties. We believe that he makes it a point to plant nothing upon his place, but what is perfctly hardy, or is likely to become so. The past spring, he has set out, in different parts of the ground, and in various exposures, a large number of single red camellias, Arbùtus Unèdo, Rhododéndron pónticum, English laurel, &c., with the anticipation that they can be made to endure our climate. We are glad the experiment is to be tried, and if it will succeed at all, it will in the favorable locations on Mr. Lee's place. Each side of the avenue, from the road up to the house, he has set out various kinds of plants, intermixed together: on the side next the lawn, Kérria japónica, Scotch and other roses, for nearly a hundred feet; the object being to form a sort of hedge: these are set in double rows, on a banking which rises three or four feet from the avenue, up to a level with the lawn: they are all growing vigorously. In a patch on the lawn, Asclèpias tuberòsa is finely in flower; the roots are apt to get thrown out of the ground by the frost. Eschschòltzia califórnica here flourishes in perfection: the soil just suits the habit of the plant: Lupins also grow well, as do, in fact, all the Columbia river plants: Lupínus mutàbilis grows three to four feet high, with spikes of its beautiful changeable flower, six inches in length. Mr. Lee has a strong plant of the pretty and graceful Chelòne barbàta, in full bloom; Calendrínia grandiflòra with its velvety foliage and rosy flowers, grows well, but does not flower abundantly.

On Mr. Lee's place are some of the finest specimens of our indigenous forest trees: oaks, beeches, ashes, &c.; of shrubs, the Euónymus americànus, Hamamèlis virgínica, hibiscuses, Laúrus bénzoin, &c. In one part of the grounds, a large patch of Gerárdia pediculària, and in another, G. quercifòlia, is allowed to grow, in all its native luxuriance. The flowers of this genus are very fugitive, but the number, and their beauty, repay this loss. The rhododendrons are budded full, and promise a good bloom another season. We have named but half of the attractions of this place, and shall improve a future opportunity to continue our remarks.

REVIEWS.

Art. I. *The Gardener's Magazine and Register of Rural and Domestic Improvements.* In Monthly Numbers. 8vo., 1s. 6d. No. XLII, for May.

The first paper in the present number is entitled, "Observations on the Gardening of Belgium, with incidental Remarks on its rural and domestic Economy, &c. &c." By John Madison, Esq.

> "Perhaps there are few people, except the English, that have a greater taste for horticulture than the Belgians; but then it is practised on quite different principles in the two countries; for where, in England, a new plant would be worth five guineas, in Belgium, the gardener would have difficulty in regaining the money he had spent in raising it, unless he were enabled to multiply it exceedingly; and even then, he would find so many competitors, that he would be obliged to take out the greater part of his gain in other plants which would be given him in exchange. Almost every one has something to do with plants; and every one, therefore, is unwilling to pay money for new plants, knowing that in his own collection, he has also plants which others want, and that thus he can always exchange. In the town of Ghent itself, there are 203 plant-houses, and in its immediate vicinity, 67."

The state of horticulture in Belgium seems very similar to that in this country, with the exception, that the taste for the pursuit, with us, is not near so general. Considering the length of time, however, which horticulture may be said to have existed as an art in this country, the exception will be somewhat lessened. The value of a new plant, which in England is worth a guinea, will here bring comparatively nothing, unless it be some favorite one, and it becomes the fashion to cultivate it; and the professed gardener or nurseryman, who spares no expense, to introduce those that are really new and deserving of general cultivation, is often compelled to discard them entirely from his collection, or offer them at a price which, if dozens were sold, would not half remunerate him for the time spent in propagating them. This arises, we believe, in part, from a system of exchanges similar to that mentioned in the above extract. That horticulture will ever arrive to that state of perfection, in this country, to which every lover of the art must sincerely wish, is rather doubtful. There is nothing to stimulate individuals to exertion; nothing to induce them to invest a capital sufficient to pursue the trade of the nurseryman with advantage; nothing to infuse that zeal among them, without which it is almost impossible to disseminate that taste, which is the first step to horticultural advancement; but we anticipate a better state of things. The more general erection of green-houses will excite a desire for plants, and we hope the nurseryman will reap the benefit of such improvements. The writer says:

"*Camellias* are a tribe of plants which are grown almost to infinity in Ghent and its neighborhood. They are the fashion; and this is, here, quite a sufficient apology for the immense numbers that are to be met with. It is very amusing to hear the gardeners and amateurs boasting to each other of their two hundred or three hundred varieties of this plant."

"*Pelargoniums* are another tribe of plants which the Ghent gardeners and amateurs cannot succeed in flowering to perfection; but then, at times, the fashion fluctuates respecting them; and this, to the Belgians, as well as to their French neighbors, is a sufficient inducement to discard from their collections the handsomest plant in existence. In fact, they place their pelargoniums much too close together; and yet, in the flowering season, are astonished to find that they are drawn up like sticks, and will seldom produce more than one set of flowers in a season; whereas all successful growers of this beautiful tribe of plants in England are aware that, with proper management, and with little pains, the pelargonium may be made to flower from April to August."

Dahlias, the Belgic gardeners do not understand the management of: they grow as high as eighteen feet.

"In the town, I do not think it possible for dahlias to be flowered in perfection, the earth being too much worn out, as well as too rich, light and spongy; but the amateurs in the country have much improved lately in growing this handsome tribe of plants. If the fashion for them could be kept up, and the country gentlemen could be persuaded to pay a handsome price for their plants, and to be a little more select in their choice, I have but little doubt that dahlias might be grown quite as well in Belgium as they are in England."

The Belgians have almost given up the cultivation of the azalea: "a few years back, they were the *mode*, and thousands were in flower at one time, in gardens where, at present, you would find but few if any at all." The Ghent gardeners have raised several of the most beautiful kinds, among which are the A. Mortèrii, and Ne plus ultra; but they have neglected them entirely. The Orchídeæ are just now in fashion, and they cultivate them very successfully.

The state of villa or country gardens is thus given:

"The country houses of the gentry are for the most part spacious and airy; but, as the family scarcely ever inhabits them during the winter months (from October to May), their gardens and pleasure grounds, during that period, are much neglected; and, with the exception of the vegetable garden, nothing can be more slovenly kept. Scarcely an evergreen is visible, with the exception of the pine and fir tribe; and rhododendrons, laurels, laurustinuses, and arbutus, are, from the severity of the winters, very scarce; and the lawns, which, in summer, are grazed by cows, instead of being regularly mown, present the most untidy and neglected appearance imaginable. The walks, instead of being gravelled, are covered with sand; which, with the want of box edging, give the garden a very unfinished appearance. True it is, that

> the beds and compartments of flowers are sometimes enclosed with a kind of border composed of flat sandy-colored oblong tiles, to prevent the earth from being washed into the walks; but which, at a distance, is scarcely seen, being nearly of the same color as the walk itself. This kind of edging in a kitchen garden, or in a nurseryman's grounds, might do very well; but, in a gentleman's pleasure-ground or flower-garden, is, to my taste, quite out of place."

Pine-apples, melons and grapes are grown generally; the two latter very successfully. Standard pears do not do well, as the soil is too sandy. Apples do not thrive at all in the lower part of the town of Ghent. Peaches are not "nearly" so fine flavored as in England. The Belgians must have a very unfavorable climate, if such is the fact: the English peaches are almost flavorless; what qualities must the fruit of the Ghent gardeners possess? The trees are never pruned before the month of April: they are then all whitewashed, to kill the insects; "so convinced," says the writer, "now am I, of the utility of an annual whitewashing to my trees, that I practise it upon a collection of Lancashire gooseberries, immediately after I have them pruned, in February." Cherries produce abundantly: the trees are propagated by grafting *en fente* in the month of April or end of March, and throw out but little gum. The composition made use of, to prevent gumming, is the following:

> "This composition consists of pitch, rosin, and bee's-wax, in nearly equal quantities, boiled over a fire, and, when liquid, applied to cover the place where the graft was made. This keeps out the rain, stops bleeding of the tree, and gives way very gently as the shoot increases: it is by far the neatest grafting composition I know."

Plums, apricots, currants, &c., produce plentifully: the soil is too dry for gooseberries, and the sun too hot. The vegetables of Belgium are generally good: asparagus is very superior, and holds the first rank: it can be eaten within a quarter of an inch of the end. Brussels sprouts are considered the next best: they are truly a delicious vegetable, and we extract the following, with the hope that it will induce all who are fond of the cabbage tribe, to cultivate it.

> "The plant here grows to about 3 feet or 4 feet in height, and is covered from top to bottom with its little round sprouts, which, when touched by the frost, have a slight taste of marrow. Sown in February, they can be eaten in September; but those sown about the 22d of March, I consider to be the best, as they come into eating just after the first November frosts, and last till the March following. Brussels sprouts ought never to be eaten before the plant is touched by the frost; and in this it resembles the savoy, which also grows here very fine in the winter: but I am inclined to think the Brussels sprouts much the hardier of the two. Brussels sprouts have supported, in my garden, without injury, more than 10° of frost, by Reaumur's thermometer."

Celery is remarkably good, considering the light soil. Peas and beans are also fine. Potatoes are poor, owing to the sandy soil. Turnips are rather small. Cos Lettuces do no better with the Ghent gardeners than they do with us: they all run up to seed. Cauliflowers and broccolis also fail in the sandy soil. This article contains many important facts, and is just such a one as should enrich a Magazine. We have endeavored to extract such as will be the most useful to our readers.

Article II is a notice of the state of gardening in part of France, made during an excursion through the country, by Mr. G. Charlwood, seedsman. Mr. Charlwood is well known as a gentleman of much intelligence, and any thing from his pen is generally read with interest. The present article is confined to an account of the markets at Paris, the nurseries, private gardens, &c. He gives the following account of the flower market:

> "The large market for the distant country growers is called *la Marché des Innocens*, the exterior line of which is also completely built on, leaving the interior a large square, which is every morning more or less occupied by the cultivators, and afterwards throughout the day, by the venders of all the minor articles of general consumption. Quite distinct, and at a considerable distance from all these, is the market for flowers, on the south side of the Seine, a space two hundred yards long by thirty wide, on which several rows of robinias are planted, which thrive vigorously. It is arranged into compartments on each side, and in the centre there is a supply of water in a reservoir. The plants are tastefully displayed and arranged on each side, and in compartments, and the centre: the latter portion is generally cleared by nine o'clock in the morning, to allow the ready access of company during the remainder of the day; the sale in the morning being materially confined to the dealers, who, as with us, purchase the plants, and convey them to the more distant parts of the city. After this time, the necessity of a good supply of water becomes apparent, as many of the plants have been recently potted, and others have been transposed to larger pots, in which practice the French gardeners are extremely expert. The markets are almost exclusively attended by the females, whose husbands frequently accompany them to assist in arranging the plants for sale, and afterwards return to their respective gardens, to superintend and assist in the labors of the soil; the cultivation of flowers and vegetables being generally confined to the limits of the city. I must not forget to state that the plants sold in the flower market are generally the free-flowering pelargoniums, cactuses, neriums, orange trees, and other showy and fragrant species; all of which are neatly tied up, and the heads of the plants are sheltered in white paper, which is formed into a kind of cup, to protect the blossoms, and yet permit them to be seen, and which improves the saleable appearance of the plants. Another portion of the quay is appropriated at this season to the sale of herbaceous and seedling plants for transplanting; and this space is occupied through the winter by the growers of fruit trees and evergreens, which are then brought to market in great number and variety."

"The most defective feature in the French gardens," Mr. Charlwood remarks, "is the bad state of their grass plots, which they affect to be very fond of, but of the treatment of which they are either quite ignorant, or very careless; as they totally neglect the only means of obtaining, or even preserving them. In most instances, the formation of a grass plot or lawn, is confined to sowing the surface with perennial rye grass, and only in some instances a few other varieties of selected grasses are intermixed; this must, at all times, in their dry, warm climate, prove defective; added to which, they entirely neglect frequent mowing; and it is not at all unusual to find a grass plot left for the advantage of cutting the crop of hay, or as fodder for cattle. The gardeners are not all ignorant of the cause of their failure, but attribute it chiefly to the severity of their climate; though this might in some measure be remedied by their attention to the best means of obtaining an object which they all confess so desirable, and by their bestowing on it the labor and attention which are absolutely necessary to its maintainance and preservation."

This is just the case with the grass plots and lawns in this country; and Mr. Charlwood has suggested the proper means to remedy these defects. We would direct the attention of those of our readers who are ambitious of possessing beautiful lawns, to a careful attention to these observations.

The remaining articles are excellent, but we have already extracted beyond our limits.

MISCELLANEOUS INTELLIGENCE.

Art. I. *Domestic Notices.*

Esculent Phalangium.—Dear Sirs,—This beautiful plant, of the natural order Asphodéleæ, which I have the pleasure of presenting you, is found in great abundance in the immediate vicinity of Cincinnati, where I collected it. I presume it may be cultivated with great facility, as it grows freely in a substratum of tough clay, and is *only* found in situations which offer such a soil. Towards the middle of May, its tall blue spikes of delicate flowers form a pleasing contrast with the rich verdure of the meadows, or adorn the steep sides of the hills.

Governor Lewis brought specimens of this plant from the sources of the Missouri, near the Rocky mountains, where it was called "Quamash" by the Indians, and its roots used by them as an article of food. Eaten in an uncooked state, it is of an agreeable mucilaginous and amylaceous flavor, with a slight astringency.

Mr. Nuttall mentions, in his "N. A. Genera of Plants," that he first discovered its locality near the confluence of Huron River with Lake Erie, in 1810, and subsequently in great abundance on the lower banks of the Ohio river. According to his observations, its geographical distridution is two thousand miles from east ts west, though perhaps not so much as three hundred miles from north to south.

Desirous of introducing it to the notice of floriculturists, particularly to those who are fond of our native plants, I have taken the liberty of sending you two bulbs, and also add its scientific description.

Phalángium esculéntum, *Nuttall Gen. Plants*, i, p. 219.

Synom. { *Phalángium Quamash*, *Pursh. Fl. Am.* i, p. 226.
Scílla esculénta, *Bot. Mag.*, t. 1596.

Class, Hexándria: Ord. Monogynia: Natural Ord. Asphodéleæ.

Root, a tunicated bulb: *leaves* radical linear and carinated: *scape* simple: *flowers* pale blue: height about two feet: time of flowering, May and June: perennial. *Yours, &c., John Lewis Russell. Salem, July* 29, 1835.

Mr. Russell will receive our best thanks for the above interesting letter, and the very acceptable bulbs of the Phelángium accompanying it. We shall endeavor to cultivate and increase them.—*Conds.*

Art. II. *Quincy Market.*

Roots, Tubers, &c.	From $ cts.	To $ cts.
Potatoes:		
Common, per barrel,	1 25	1 50
per bushel,	50	62½
per peck,	17	25
Kidneys, per bushel,	1 00	
Turnips:		
New, per bushel,	none.	
per bunch,	4	6
Onions:		
New, per bushel,	1 00	1 25
per peck,	25	31
per bunch,	4	6
Old, per bunch,	6	
Beets, per bunch,	4	
Carrots, per bunch,	6	
Parsnips, per bunch,	none.	
Horseradish, per bunch,	none.	
Shallots, per pound,	20	
Garlic, per pound,	12	14
Cabbages, Salads, &c.		
Cabbages: per dozen.		
Early York,	50	62½
Savoys,	50	62½
Cauliflowers, each,	25	
Beans: shelled.		
Sieva, per quart,	20	25
String Cranberry, per bushel,	75	1 00
per peck,	25	
Common white, per quart,	12	
Sweet Corn, per dozen ears,	10	12½
Tomatoes, per dozen,	10	12½
Peppers (for pickling), per lb.,	3	
Spinach, per peck,	none.	
Squashes and Pumpkins.		
Bush squash, per dozen,	6	12
Summer crookneck, per dozen,	6	12
Canada crookneck, per pound,	3	4
West India, per lb.	3	4

Pot and Sweet Herbs.	From $ cts.	To $ cts.
Parsley, per half peck,	50	
Sage, per pound,	20	30
Marjoram,	50	
Savory,	25	37
Spearmint,	80	
Fruits.		
Apples, dessert:		
Common, per barrel,	2 00	2 25
per bushel,	1 00	
per peck,	25	31
Sopsavine, per peck,	37½	50
Sweet (for baking), per peck,	25	
Pears:		
Eng. Catherine, per bushel	2 00	2 25
per ½ pck,	25	31
Common, per peck,	37½	50
Bartlett's, per dozen,	37½	50
Plums:		
Green Gages, per quart,	37½	50
Damsons, per quart,	20	25
Common, per quart,	25	37½
Peaches: per basket,	7 00	
per dozen,	50	75
Blackberries, per quart,	12	17
Whortleberries, per quart,	6	8
Cucumbers, per dozen,	8	10
—— (for pickling), per 100,	20	25
Pine Apples, each,	25	50
Grapes:		
Black Hamburgh, per pound,	75	1 00
White sweet water, per lb.,	50	75
Watermelons, each,	12	25
Muskmelons, each,	12	25
Oranges, per box,	3 75	4 00
per hundred,	2 75	3 00
Lemons, per box	4 00	
per hundred,	1 25	1 50
per dozen,	25	
Almonds, per pound,	12	14
Filberts, per pound,	4	6

Remarks. The market is plentifully supplied with almost every variety of esculent vegetable and fruit of the season: good fall harvests are now anticipated, and the supply will probably be equal to all demands. Potatoes are now quite plenty, and selling very low. Onions have acquired a good size, and are to be had by the bushel or in larger quantities: some thousand bunches of old ones yet remain on hand. Cabbages, owing to the late rains, are very fine. Cauliflowers are yet scarce. Beans of most kinds are plenty; Sievas command a good price. Tomatoes are abundant, and are now sold cheap. Canada crookneck squashes have come to hand since our last in considerable quantities, but they have not yet arrived at maturity.

Of apples, the crop this year is very great; and since our last, they have been plentiful in the market. Pears are also exceedingly abundant, and of fine appearance; what are termed Jargonelles, are all gone, and the English Catherines or "Katterns," as they are better known by, now take their place; we observed a few Bartlett's, but they were very inferior, and not near ripe: we are sorry that they should be sent in before they are half grown; as it tends to injure the character of such a good pear, to force it into market, green and flavorless. Peaches from New York are plentiful, as are also Green Gage plums, from the same place. Grapes are now more abundant, and of good color and flavor. Watermelons and muskmelons have just been received, grown in this vicinity.

Boston, Aug. 22. M. T.

ART. II. *Massachusetts Horticultural Society.*

Saturday, July 25th.—Exhibited.—From the garden of M. P. Wilder, Ròsa microphylla, and Tigrídia pavònia: dahlias,—Widnall's perfection, Queen of the dahlias, Cicero, Lass of Richmond Hill, Inwood's compacta, Dennissii minor, Maid of St. Leonard's, Picta formosissima, Dutchess of Richmond, Feronia, Aurantia speciosissima. &c. From S. Walker, the following dahlias: Tincta, Romulus, Queen of the dahlias, Ophelia, and Dennissii; white and scarlet, and yellow and scarlet picotee pinks; Phlóx tardiflòra álba, and other sorts; a seedling of Delphínium grandiflòra, very double.

From R. Manning, Salem, Amiré Joannet (Hort. Soc. Cat. and Duhamel), the *Early sugar* of Prince's catalogue. From Joseph Morton, Milton, Madeleine (Citron des Carmes of the Hort. Soc. Cat.), and petit Muscat pears. Citron des Carmes, from Dr. Shurtleff, Boston. From E. Breed, Charlestown, old Newington peaches (forced fruit). From W. Kenrick, twenty-two varieties of gooseberries: *Red,*—Wilmot's early red, Royal George, Crown Bob, Keen's seedling, and Top Sawyer: *Yellow,*—Viper, golden Yellow, Gunner, and Bunker's Hill: *Green,*—Green Laurel, Green Ocean and Jolly Tar: *White,*—Champaigne, White Bear, Queen Sheba, &c. From S. Walker, seventy-three sorts, as follows: *Red,*—Lancashire Lad, Bank of England, Roaring Lion, Crown Bob, Jubilee, Prince Regent, Top Sawyer, Hero, Marquis of Stafford, and Rough Robin: *Yellow,*—Viper, Hopley's Globe, Golden Queen, Smiling Beauty, Rockwood, and Gunner: *Green*—Princess Royal, Ocean, Gascoigne, Rifleman, Thrasher, Queen Anne, Jolly Tar, Jolly nailer, Lord Crewe, Jolly Angler, Green Chisell, and No-Bribery: *White,*—Bonny Lass, White Eagle, Lady of the Manor, Queen Sheba, White Lion, and Whitesmith: the other kinds not named. From J. A. Kenrick, several varieties of gooseberries. From E. Breed, Viper and Walnut gooseberries. From Dr. Shurtleff, seedling gooseberries. The following were, by the committee, on fruit, adjudged the best for the table: six of the largest weighed two and a half ounces: *Red,*—Top Sawyer, Warrington red: *Yellow,*—Golden Gourd, Hopley's globe: *Green,*—Gascoigne, Waiting Maid: *White,*—Queen Sheba, Wellington's glory.

At this meeting, a committee was chosen, to make preparatory arrangements for the celebration of the anniversary of the society.

August 1st.—Exhibited.—From the Hon. John Lowell, Yúcca filamentòsa, and Erythrína pícta. From Wm. Kenrick, Bignònia rádicans, phloxes, cereopsis, honeysuckles, hollyhocks, Hypéricum ascyroìdes, &c. Double pomegranate, Echinops spærocéphalus and Gília coronopifòlia, from R. Ward, Roxbury. From M. P. Wilder, dahlias of the following varieties: Dancer's Helen, Queen Bess, Queen of the dahlias, Belladonna, Maid of St. Leonard's, Ophelia, Earl of Chichester, Antonio, Agrippina, Negro boy, Inwood's compacta, Cicero, Widnall's Aurora, &c. From S. Walker, Phlóx tardiflòra, white and red, Lobèlia fúlgens, Monárda purpùrea, and a new seedling, raised between M. dydima and purpùrea: Stàtice tartárica, larkspurs, pinks, &c.; dahlias,—Barratt's Susanna, Countess of Liverpool, Dennissii and Queen of the dahlias. From Messrs. Hovey, poppies of several kinds, phloxes, pinks, nasturtiums, Verbena chamædrifòlia, Gaillárdia aristàta, Calliópsis bícolor, &c. &c.

From R. Ward, Roxbury, russett apples of the growth of 1834. Citron des Carmes, and petit Muscat pears, from Messrs. Winship. Gooseberries from P. Wainwright, Roxbury. From Wm. Kenrick, the following kinds of gooseberries: *Red,*—Crown Bob, Rough Red (Bratherstones Huntsman): *Yellow,*—Golden Yellow: *Green,*—Green Myrtle, Green

Laurel, Green Ocean: *White*,—Champaigne, Queen Sheba. Gooseberries, of different sorts, from S. Walker. From A. Houghton, Jr., Lynn, seedling gooseberries.

August 8th.—Exhibited.—From S. Sweetser, the following dahlias: alba fimbriata, King of the whites, Widnall's Chancellor, Paragon of Perfection, Globe, Picta formosissima, Negro boy, &c.; noisette rose Lamarque, Gladiòlus natalénsis, Mauràndia Barclayàna, Lophospermum erubéscens, Calámpelis scaber, Verbèna Aublètia. From S. Walker, phloxes, veronicas, campanulas, dahlias, viz., Countess of Liverpool, Ophelia, Amanda, Dennissi &c. Tradescántia díscolor, from Messrs. Winship. From Thos. Mason, Nèrium spléndens, Sálvia fúlgens, Bignònia rádicans, phloxes, pinks, roses, &c. From M. P. Wilder, dahlias, viz., Pavonia, Theodore, Widnall's Defiance, Queen of the dahlias, new crimson Globe, Belladonna, Lovely's Earl Grey, Maid of St. Leonard's, Le brilliant, Lass of Richmond Hill, Coccinea multiflora, &c. Bouquet of flowers from B. P. Winslow, Boston.

From E. M. Richards, Madeleine pears. Citron des Carmes, from M. P. Wilder and Cheever Newhall. Beauty of Summer, from R. Manning. From John Heard, Watertown, a pear, the tree from which it was taken having been received from Mr. Knight. Madeleine pears from Charles Bowen, Newton. Apples from B. V. French. From M. P. Sawyer, Portland, a fine melon.

From E. Weston, Jr., specimens of several indigenous plants, viz., Cássia marylándica, Gnaphàlium margaritàceum, Lysimàchia hybrida, Agrimònia eupatòria, Apocynum androsæmifòlium, Eupatòrium purpùreum, Spiræato mentòsa, Achíllea millfòilium, Cephalánthus occidentàlis, Lespedèzia divérgens, Baptísia tinctòria, Heliánthus divaricàtus, Aster solidaginoìdes, Clèmatis virgínica, Dioscòrea villòsa, &c.

Read.—Letters from Gen. H. A. S. Dearborn, Commodore Porter and Alexander Walsh, Esq. These were accompanied with seeds for distribution among the members.

Distributed.—Seeds of the Acàcia julibríssum (silk tassel rose tree) received from Com. Porter; several kinds of Chinese seeds from A. Walsh, Esq.

August 15th.—Exhibited.—From E. Weston, Jr., native plants,—Clèthra alnifòlia, Clèmatis virgínica, Saggittària saggittifòlia, Lobèlia cardinàlis, Gerárdia flàva, Spiræa salicifòlia, &c. From the Hon. John Lowell, specimens of seedling dahlias. From S. Walker, seedling phlox, Dracocéphalum rèpens, Lobèlia fúlgens, Delphínium sinénsis, and dahlias, viz., Well's white, Queen of the dahlias, Dennissii, Brown's Ophelia, Paragon of Perfection. Dahlias from M. P. Wilder, as follows: Lord John Russell, Goldfinch, French white, Lady Grenville, Queen Sheba, Ophelia, Belladonna, Agrippina, and several others. Bouquets from Wm. Kenrick, B. P. Winslow and Thos. Mason. Phloxes, pinks, roses, Verbèna chamædrifòlia and Aublétia, Lychnis chalcedónica *var.* álba plèno, Campánula trachèlium plèno, &c., from Messrs. Hovey.

From R, Manning, Salem, early Catherine or Rousselet hatif pears: pronounced by the committee to be one of the finest of early pears. From M. P. Wilder, Dorchester, Jargonelle. From Dr. S. A. Shurtleff, a kind called the Queen Catherine. July or sugar-top pears, Red Juneating, early Shropshirevine, and early striped apples, from E. M. Richards. From S. Walker, morello cherries and July or sugar top pears. From Charles Bowen, Newton, skinless or Poir sans pieu, Beauty of Summer, or Bellissime d' ete, and Fin or d' ete, or fine Gold of Summer pears. From S. Philbrick, Brookline, Early Bough apples. Early Shropshirevine, red Juneating, and William's Favorite apples, from E. Vose. From A. D. Williams, red and white currants. Blue Orleans plums from George Domett, Boston.

ART. IV. *Meteorological Notices.*

FOR JULY.

THE heat of the weather, during this month, was rather moderate: showers were frequent, and the quantity of rain which fell was very great: the winds prevailing from east to south.

THERMOMETER.—Mean temperature, 66° 24′. Highest, 87°; lowest, 44° above zero.

WINDS.—N. one day—N. E. one—E. nine—S. E. three—S. eleven—S. W. three—W. three days.

Force of the Wind.—Brisk, fifteen days—light, sixteen days.

Character of the Weather.—FINE, sixteen days—FAIR, nine days—CLOUDY, six days.

Rainy, two—*Showery*, eight days.

MONTHLY CALENDAR

OF

HORTICULTURE AND FLORICULTURE,

FOR SEPTEMBER.

FRUIT DEPARTMENT.

Grape Vines, in the green-house or grapery, will now be ripening their wood and fruit: trim off the laterals, where the wood has become hard and firm, close under the eyes, on the main shoots. The shoulders of the large bunches on the Hamburgh vines, should be tied up to the trellis with bass matting. If they have been syringed with sulphur water, give them now pure water, throwing it with considerable force, to wash off the dust left by the frequent use of the former.

Peach trees should now be budded, where they were neglected in August (p. 209).

Strawberry beds should now be made and planted (p. 299).

FLOWER DEPARTMENT.

Green-house plants, of such kinds as want repotting this fall, should be now attended to, that they may get well established before cold weather.

Chrysanthemums should be well watered, occasionally using liquid manure (p. 138).

Dahlias must be tied to strong stakes, to prevent their being blown down by high winds, which often occur this month (pp. 130, 172).

Roses may still be budded (pp. 217, 290).

Seeds of Schizanthus, *ten-week stocks*, and other kinds of annual flowers, which are wanted to decorate the parlor or green-house, should be sown this month (pp. 101, 133, 177, 179).

THE
AMERICAN
GARDENER'S MAGAZINE.
OCTOBER, 1835.

ORIGINAL COMMUNICATIONS.

Art. I. *On the Origin of the Baldwin Apple.*

Dear Sir,

In conversation with you a few days ago, relative to the Baldwin apple, I observed that I was acquainted with the original tree, and gave you its history. Thinking the facts which I had stated, of some importance, you requested me to give them to you in writing.

Mr. Kenrick, in the Orchardist, says it is a Massachusetts apple; and Mr. Fessenden, in the American Gardener, says it originated in the county of Middlesex. Both are right. The original tree grew on the farm of my grandfather, Mr. John Ball, formerly of Tewksbury. The farm was situated one mile and a half south of the Merrimac river, and three miles south-east of Lowell. Mr. Ball purchased the land, then in a state of nature, about the year 1740. He cleared up a small lot, on which he erected buildings. This tree came up not long after, in the lane, leading from the house to the barn. My father, the late Dr. Benj. Kittredge, of Tewksbury, who was born in the year 1742, within a quarter of a mile of the tree, and resided there until his death, in 1822, said it was a large tree when he was a lad; that it was not engrafted, as no person at that time, in Tewksbury, was acquainted with grafting; that it was, to use his expression, "the mother of them all." It is now more than forty years since scions were taken from this tree and set on trees growing on my father's farm. This apple was confined to that neighborhood for many years, when the late Col. Baldwin, of Woburn, became acquainted with it. He at once perceived its great excellence, and brought it into general notice. From him it received its present name. We called it the Red Graft, as it was then the only engrafted fruit we had on our farm; and it still retains that name in our family. The original tree was alive when I removed to this place, in the summer of 1817. In 1832, being at Tewksbury, I visited the spot where it once stood, but found it had disappeared. It was a very high tree, by far the highest apple tree I have ever seen; but not large in circumference, the limbs growing upright. The trunk, too, was unusually large for a Baldwin, but had begun to decay when I last saw it.

Yours truly,

Portsmouth, Sept. 8, 1835. RUFUS KITTREDGE.

The above interesting letter was addressed to a correspondent of ours in Portsmouth, who, deeming the information it contained too valuable, to those who love to trace out the origin of our native fruits, not to be made public, has forwarded it to us for insertion in our Magazine. We shall ever be pleased to receive, from any of our friends, such articles, and shall be highly gratified to hear directly from the writer of the above paper, who is so well able to aid in the dissemination of a taste for the cultivation of fruits. The history of many native varieties, which are in general cultivation in gardens, is scarcely known; and among the many excellent articles with which we are so kindly favored, none would be read with more gratification than those relating to the origin of the fruits which are yearly produced in our gardens.—*Conds.*

ART. II. *Descriptive List of several Varieties of Apples, suitable for planting a Kitchen Garden.* By E. M. R.

IN answer to the request of "An Amateur," on page 313 of your No. for August, I would recommend the following sorts of apples: there are doubtless a great many other varieties equally deserving cultivation, which I have not had the good fortune to have met with.

EARLY HARVEST. Of rather flat form, and of medium size; of a deep straw color; rather acid, but pleasant; particularly adapted to culinary purposes; may be kept in a sound state for several weeks after it comes to maturity, which is in July. It is to be regretted that this tree begins to show symptoms of decay in some situations.

American Red Juneating. A very fine fruit, and of great beauty; is equally valuable for cooking and the dessert. The color is a uniform and beautiful red; the form globular; the size from small to medium. Perhaps it is one of the most popular summer apples in this vicinity. Ripe in August.

Benoni. This fruit has been brought into notice within a few years; it originated in Dedham (the parent tree is still growing); it is from medium to large size, of a red color, streaked with *very* dark red; its form oblong, tapering at the blossom end; the flesh is very firm, and of a pleasant flavor for eating; for cooking, it is not thought to be equal to the last named variety; it bears almost to a fault every second year. Ripe in August and September.

Williams's Apple. The fruit is of a beautiful red, and of full medium size; the form oblong and regular, and is quite a popular fruit; the tree is vigorous and productive. The time of its ripening is between the red Juneating and Benoni.

Early Bough, or Sweet Bough. Some of them attain quite a large size; of a pale yellow color; the flesh is white, very tender and sweet; a fine fruit for eating or baking. Ripe in August.

American Summer Pearmain. This fine fruit deservedly holds a very high place, (none of the foreign varieties, which have come to my knowledge, having surpassed or even equalled it); the form varies from globular to oblong; over medium size; the color in the sun, of a bright red, faintly spotted with dots of white; the flesh is tender and juicy. On the authority of Mr. Coxe, it is "frequently preferred to a fine pear;" the tree bears abundantly. In eating in August and September.

Pumpkin Sweeting. A very large apple, flattened at the stalk and blossom ends; color of a bright russet; the flesh very sweet and good flavored; fine for baking, and is quite a tolerable fruit for eating; superior to most baking sorts; the tree is of upright and very vigorous growth. In perfection in September.

Porter. This variety originated in Sherburne, and is of rather large size; the form oblong and regular, and of a bright straw color; the flesh is high flavored, and it is justly considered a fine fruit. September.

Maiden's Blush. This is now considered by many to be synonymous with the *Hawthornden*; it is of a flat form, and of great beauty, having a very delicate blush on one side of those exposed to the sun; while those growing in the shade are of a very light straw color; a first rate fruit for cooking, and its great beauty entitles it to be classed among the varieties suitable for the dessert. September.

FALL PIPPIN. A fine fruit, of very large size; form oblong, with ribs on its sides; the color a greenish yellow; its flavor is fine and sprightly, and for a fruit of its size, I have not seen its equal for good qualities. November.

FALL SOPSAVINE, or SHROPSHIREVINE (SOPS-OF-WINE). I believe this very high flavored fruit was introduced by Mr. A. D. Williams, of Roxbury. The description of an apple called "*Sops of Wine*" (Py. Mal. Brent, plate II), bears a strong resemblance to this variety. Autumn.

Among other desirable fruits, principally of American origin, but which a particular description of, must be deferred, are the following:

LYSCOM, known also by the names of *Matthew's Stripe*, and *Osgood's Favorite*,—a very superior autumn fruit.

STUMP, or BOXFORD. A striped apple of great beauty, and also a fine autumn fruit.

HUBBARDSTON NONSUCH. Winter.

LADY APPLE, second quality, but of great beauty, and productive, (an old variety). Winter.

ORTLEY, or WOOLNARY LONG, a first rate fruit. Winter.

PENNOCK'S RED WINTER, very agreeable flavor.

RHODE ISLAND GREENING, succeeds well on light soils.

ROXBURY RUSSET, requires a moist rich soil.

WINE APPLE, winter; and DANVERS WINTER SWEET.

BALDWIN, winter; and MOORE'S SWEETING, a very late keeping fruit.

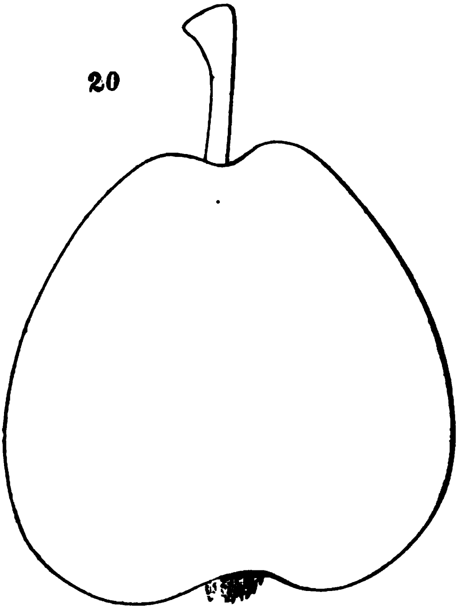
E. M. R.

Dedham, Sept. 7th, 1835.

ART. III. *An Account of some new Varieties of Fruit; communicated by* Messrs. C. & A. J. DOWNING, of the Botanic Garden and Nursery, Newburgh, New York, *in a Letter to the Conductors; accompanied with Specimens of the same.*

MUSCADINE PEAR. This fine pear (fig. 20), which is about the size of the Julienne or Summer St. Michael, and comes into maturity soon after that valuable summer variety (about the first of September), is believed to have originated in this neighborhood, on the farm of Dr. Fowler, and received its name from this gentleman, on account of the fine musky flavor of its melting flesh. The color greenish yellow; form obovate, tapering towards the stalk, which is about three quarters of an inch in length; eye very slightly depressed. The trees are most prolific bearers, and are here considered a very valuable late summer variety.

20



SCARLET GAGE PLUM. This fruit is very plentiful in this vicinity, where it has been propagated by suckers from what is supposed to be the original tree of the kind, and which first attracted attention about a dozen years ago. The fruit is of a deep purplish crimson, of an elongated oval form, and the stem scarcely at all sunken. The flesh is of an agreeable sprightly flavor; color deep yellow, and does not part readily from the stone. The trees produce remarkably abundant crops, and the appearance of the long branches, densely loaded with highly colored fruit, is very striking. It is obviously different from most of the gage family in its character, yet, as it has generally received the above name in this neighborhood, we have not thought proper to alter it.

CRUGER'S SEEDLING PLUM. A very handsome variety, raised from a stone of the Washington [Bolmer's Washington], by Henry Cruger, Esq., of the vicinity of West Point, N. Y. It differs entirely from its parent, as the color is a beautiful light lilac, and the flesh resembles in flavor the prunes. The fruit is of medium size, and tapers somewhat towards the stalk, which is about three fourths of an inch in length, and inserted in a slight cavity.

We are exceedingly indebted to the kindness of the Messrs. Downing, in sending us the above description of new and valuable fruits, accompanied with fine specimens of the same, which reached us in most excellent preservation. We would scarcely have supposed it possible for fruit, particularly plums, to be carried to such a distance without spoiling their beauty and injuring their appearance; but these, when we received the box, were as fresh and sound as they were when taken from the tree. The manner of packing, which will perhaps be interesting to some of our readers to know, who wish to send choice fruits to their friends at a distance, was as follows: Perfectly dry, soft moss was placed in the bottom of a small box, of the size wanted to contain the fruit, to the depth of two inches; on this the fruit was placed, each plum, peach, or any other variety, wrapped up in a piece of soft paper; on this layer was put one of dry moss, and then a layer of fruit wrapped up as before; thus proceeding until the box was filled. We have no hesitation in saying, that grapes might be transported in this manner several hundred miles.

Agreeably to the Messrs. Downing's request, we presented specimens of the muscadine pear and the scarlet gage plums, before the Massachusetts Horticultural Society.

We also showed them to several other gentlemen who have considerable knowledge in pomology, and who pronounced the muscadine pear to be a very valuable variety: for ourselves, we confess we have not tasted a finer kind for the season, as yet, in this vicinity; and the sorts we have tasted have not been a few, as we have had the pleasure of visiting the gardens of several of our most eminent horticulturists, where we had nearly all the specimens worthy of cultivation before us. We have, consequently, appended a figure, which we took from one of the largest and finest of those that were sent us, to the Messrs. Downing's excellent and true description. The form of the pear is very handsome; the color delicate; the flavor highly perfumed; flesh juicy, rich and melting. The scarlet gage plums were also very fine; but it is so different, as is stated above, from the character of the gages, that we should think it judicious to alter the name; it is evidently worthy of extensive cultivation. Cruger's Seedling was also pronounced by the gentlemen to whom we showed the specimens, a very fine variety; its flesh is not so rich as the scarlet gage, but its form and appearance is highly striking; it is an excellent kind for transportation.

The other varieties with which we were favored, were the violet pedrigon and blue gage plums, and a Capiaumont pear. The violet pedrigon is a fine plum, of rich appearance; the color of the skin intensely dark, and covered with a beautiful bloom. The purple gage, the Messrs. Downing inform us, they think the "most delicious in flavor of all plums:" we have no hesitation in saying it will rank among the very best. No such kind, to our knowledge, has ever been fruited in this vicinity. The Capiaumont pear we showed, agreeable to request, and ascertained that it was the same as is grown about Boston under the same name.

The Messrs. Downing will please accept our thanks for the information contained in the above letter, and we hope we shall soon have the pleasure of hearing from them again.

ART. IV. *On the Cultivation of the Potato, during the Winter Months.* By P. Q.

SIRS,

I HERE send you a few remarks on the cultivation of the *potato*, so as to procure *new ones* in the months of February, March and April. About the middle of September, I procure a quantity of sandy loam; exposing it for some time before the sun, until thoroughly dry, when it ought to be put under cover until wanted. About the same time, I look out for large boxes or barrels; they ought to be carried to the place intended for the growing of the potatoes, and for this I should prefer a mushroom house, or, in want of that, they will do very well in a dry, dark cellar, or fruit room, providing they be out of danger of frost. After the potatoes have been well ripened, and taken from the field and dried for a fortnight, at least, I pick out as many of the largest of them as I think I may want; preferring a dry, mealy potatoe to a *wet one*. Beginning first with a layer of earth, six inches thick, in the bottoms of my boxes or barrels, then with the whole potatoes, placing them entire upon the earth about twelve inches each way, and so continue with a layer of earth eight inches thick, and a layer of potatoes, till you arrive at the top of each box or barrel.

Potatoes may be had in this manner any month in the season, by putting in a successive box every three weeks. I have seen the finest ones taken from a box placed in a mushroom house, where there had been a mild, moist heat, kept up by dung. The old potatoes will vanish away without putting forth any vines, if kept in the dark, leaving new ones to supply their place; I have gathered them in this manner as large as hen's eggs, on the first of February, and very few, if any persons, could tell the difference between them and potatoes grown in a frame; the whole art lies in having the sandy light loam perfectly dry. The process is easy, simple, and well worthy of a trial. In taking out the potatoes, I would prefer lifting earth and potatoes out with a flower pot, instead of a spade, passing the whole through a coarse sieve.

Yours, &c., P. Q.

Philadelphia, Aug. 17*th*, 1835.

Art. V. *Beautiful Plants growing wild, in the Vicinity of Boston.* By E. B. Kenrick, Watertown.

Gentlemen,

In compliance with your frequent request, I have endeavored to form a descriptive catalogue of those plants which are at once natives of our vicinity, and worthy of cultivation on account of the beauty of their flowers. Of a large proportion of these, I can speak from personal observation; having frequently sought and found them in their native wilds, and afterwards preserved, and analyzed them. With a view to render the present selection more complete, I have occasionally stepped a little beyond the outskirts of our metropolis, and have also described a few plants which adorn the Alpine heights of more northern regions. Several beautiful natives have been excluded from this catalogue, merely on account of their being so common as to be thought little better than weeds. Others, which are not in this predicament, might, perhaps, have been omitted, or added, to advantage; but, on this point, opinions are likely to differ.

It has not been my design to furnish mere botanical descriptions. On the contrary, it has been my endeavor to render my descriptions intelligible to readers of *all classes;* and thereby to enable them to identify the plants described. And for this purpose, I have not only translated (as may be said) the best botanical descriptions to be obtained, but have attempted to improve the descriptions, by interspersing original remarks.* How far I have succeeded in the truly difficult task of rendering these descriptions at once exact, concise and familiar, must be left for others to decide.

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* I must not forget, in this place, to acknowledge my peculiar obligations to the excellent *Florula Bostoniensis* of Dr. Bigelow.

The plants may be divided into two classes, viz., *Herbaceous Plants*, and *Flowering Shrubs.* First,

HERBACEOUS PLANTS.

[N. B. All these plants are perennial, except where notice is given to the contrary.]

ANTIRRHINUM.

Antirrhìnum linària Willd. Snap Dragon. A beautiful plant, from one to two feet high, with numerous branches. Flowers yellow, or sulphur color, shaped like those of the common snap dragon, and growing in a long spike.—Common by road-sides; perhaps exotic.—Blossoms in July and August.

AQUILEGIA.

Aquilègia canadénsis Willd. Columbine. Blossoms scarlet without, and yellow within. More delicate than the common garden columbines, but resembling them in general appearance.—Dry hills, rocks, and pastures.—Flowers in April and May.

ARETHUSA.

Arethùsa bulbòsa Bulbous Arethusa. The root of this beautiful plant is a bulb. Stem two-leaved, and from eight to twelve inches high. Petals five, of a bright crystaline purple, cucullate or curved forward, three exterior and two interior.—Wet meadows, Brookline, West Cambridge.—May, June.

ASCLEPIAS.

Of this genus we have many species, all of which have a family likeness to the Asclèpias syriàca, or common milk weed.

Asclèpias amœna. Stem undivided, from two to three feet high, and a little hairy or pubescent on two sides. Leaves oval, short stemmed, pubescent or hairy beneath. Blossoms in many flowered upright umbels, or umbrella-formed clusters, at the top of the plant. Flowers of a dark peach blossom colór.—Damp places; near Newton Theological Seminary.—July, August.

Asclèpias incarnàta. Stem erect, branching above, downy. Flowers crimson purple, half the size of those of common milk weed. Leaves lance formed, rather downy both sides. Umbels mostly double at their origin. A variety, *púlchra,* is more delicate, more hairy, and has its leaves sharper pointed, and with shorter stems.—Sides of ponds, &c.—July.

Asclèpias quadrifòlia Four-leaved Asclepias. A rare and elegant plant, well worth cultivating. Stem upright, about a foot high, smooth, simple, or undivided. Leaves commonly about eight, in fours, stout stemmed, ovate (or egg-formed, with the stem at the larger end), also acuminate, or ending in a long, produced, sharp point. Umbels two, or few, terminal, axillary (or growing from the shoulders of the leaves), with small, white, sweet smelling flowers.—Roxbury, Brookline, Newton—.June.

Asclèpias tuberòsa Butterfly Milk weed. Stem three feet high, erect, hairy, with spreading branches. Leaves sessile, or stemless, lance-formed, oblong. Flowers large, bright orange. Umbels numerous, terminal on the ends of the branches, corymbed or flat topped. Root large, fleshy, branching, and often spindle-formed. This is the most showy of all our native species of Asclèpias.—Dry, sandy soils.—Newton, and particularly Woburn and its vicinity.—July, August.

Asclèpias verticillàta Whorled Milk weed. Stem unbranched, about three feet high, and marked with pubescent lines. Leaves smooth, rolled outwards, linear or grass-formed, whorled, or surrounding the stem in horizontal rings. Flowers small, greenish white. Umbels several, small, coming out from among the upper whorls of leaves. This is a very neat species.—Dedham Turnpike, Roxbury.—Blossoms in June.

ASTER.

The Aster, or Star flower, is exceedingly abundant in the United States, and, with the genus Solidàgo, predominates, in August and September, over all our other native plants then in flower. The species and varieties of these genera are also acknowledged to be very difficult to define.

Aster amygdalìnus, or *Aster umbellàtus* Umbelled Aster. Stem leafy, four or five feet high, branching into a large compound, flat-topped corymb or arrow-like head. Leaves large, numerous, lance-formed, acuminate, tapering at base, rough on the edge, having an apricot-leaf appearance, but darker, and more wrinkled. Flowers large, white.—Common in low grounds.—August, September.

Aster cyàneus, or *Aster amplexicaùlis* Blue flowered Aster. This is one of the most beautiful, if not the "handsomest of all our wild asters." Erect, wand-like, perfectly smooth, panicled, or divided and subdivided. Leaves oblong, lance-formed, tapering to an acute point, smooth and even, with a rough edge, slightly serrate, or notched about the middle; also clasping at their shoulders. The lower leaves are contracted at their bases; and the branches of the panicle are furnished with a few small leaflets. Flowers large, "blue," or rather violet, or dark lilac.—Borders of woods and fields. —August, September.

Aster multiflòrus Many flowered Aster. Stem two feet high, very hairy, diffusely branched, having the branchlets on one side; leaves grass-formed, undivided, nearly smooth, and somewhat ciliate or eyelashed. Flowers small, very numerous, with white rays, and yellow centre.—Rocky fields, &c.—September.

Aster Novæ-angliæ. New England Aster. A very beautiful plant, growing three feet, or, in rich soils (it is said), ten feet high. Stem brown, straight, very hairy. Leaves very numerous, grass-formed, lanceolate, sharp-pointed, and continued at base into small rounded lobes, clasping the stem. Flowers large, bluish purple, or common thistle colored, crowded at the top of the stem; calyx scales linear, lanceolate, of a dark brown on the inside.—Road-sides, &c. —South Boston, Brookline, Brighton, &c.—September.

Aster puníceus Red-stalked Aster. A tall, handsome species, from three to six feet high. Stem rigid, or stiff, zigzag, covered with stiff hairs, and often, but not always, red, or purple. Leaves lance-formed, somewhat clasping (that is, at the shoulders), tapering at both ends, acuminate or long-pointed, with large serratures (like saw teeth) in the middle; also rough on the margin and upper surface. Branches panicled (like oats, &c.), and bearing slightly reddish blue flowers, rather above the middle size.—Common in damp localities.—September.

CALLA.

Cálla palústris Northern Calla. A handsome, curious aquatic plant, which may be known by its resemblance to the Cálla æthiópica of our green-houses. The *proper* flowers grow on a spadix, or a sort of conical spike, just below which is a spathe, or one-leafed, flat, oval, white calyx (about an inch long), tipped with a bristle, and united to the main stalk by a sheath at the shoulder. Berries scarlet, appearing like a bunch of grapes in miniature. Leaves smooth, entire or undivided, acuminate, heart-shaped, and having long stalks.—In wet places, Newton, Cambridgeport, &c.— July.

CALOPOGON.

Calopògon pulchéllus, or *Cymbèdium pulchéllum* Grass Pink. This fine plant is about one or two feet high, with a single, grass-like, sheathing leaf. Root bulbous. Flowers several (on a sort of spike), with five spreading, purple, or rather flesh, or pink-colored petals.—Common in meadows, among grass.—July.

CASSIA.

Càssia chamæcrìsta. A most elegant annual, and somewhat sensitive plant, from one to two feet high. Leaves linear, in many pairs, with glandular petioles or leaf stems. Flowers yellow, having petals with two spots. Pods pubescent.—Near New Haven, &c.—Dry sand.—May, June.—Annual.

CHIMAPHILA.

Chimaphìla umbellàta, or *Pyròla umbellàta* Common Winter green. Called by the Indians Pipsissiwa. Too well known, and too much admired, to require description, especially as it is doubtful whether it will flourish out of its native woods.—Dry woods.—June, July.

Chimaphìla maculàta Spotted Winter green. The leaves of this beautiful species are variegated with long spots, serving abundantly to distinguish it from the other species of Chimaphìla, or Pyròla.—Newton Upper Falls; also near Nonantum Hill, at Newton.—Rare.—July.

CONVOLVULUS.

Convólvulus sèpium Wild pink-colored Convolvulus. This is a member of the well known family of the morning glory, with its twining stem, and funnel-shaped flowers. The present species is one of the finest of the genus. Leaves large, arrow-shaped, the barbs or hinder lobes being cut off at the ends, particularly in the upper leaves. Flowers large, pink-colored and white.—Twines about bushes in low grounds.—June.

Canvólvulus arvénsis. Leaves arrow-formed, with the barbs sharp-pointed. Flowers nearly white, smaller than those of the preceding species.—Dorchester.—June.

CORYDALIS.

The flowers of this genus are labiate or lipped, having an upper and a lower lip, like snap dragon, &c.; and their pods are siliquose, or long and slender, like those of mustard, &c.

Corydalis cucullària, or *Fumària cucullària* Dutchman's Breeches. Of *coarse*, this must be *fine*. "A delicate, fine-leaved plant." Leaves radical, or from the top of the root, which is bulbous. Flowers large, white, arranged on one side of the stem, and having two spurs (not spurs of Dutchman's boots) at the bottom.*—Woods, Jeffrey, N. H.—June.

Corydalis formòsa Red flowered Corydalis. An exceedingly beautiful plant, somewhat larger than the preceding. Nodding, many flowered, with a tuberous root. Leaves radical, cut-winged, very glaucous or mealy sea-green underneath. Flowers rose-colored, with two nectaries or spurs at the bottom of each.—On the sides of Ascutney mountain, Vermont, also Hanover, N. H.—July.

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* I would humbly propose to some of our gentlemen florists, who are so fond of double flowers, to try their hand at creating a *Double Dutchman's Breeches.*

Corydalis fungòsa, or *Fumària fungòsa* Climbing Corydalis. Stem climbing. Leaves furnished with tendrils. Flowers flesh-colored, axillary, racemed, or having several smaller flower stems branching from a larger one.—Maine.—In bloom all summer, and forming handsome festoons or bowers.

Corydalis glaùca, or *Fumària glaùca.* This delicate plant is from one to four feet high, erect, branching, having the stem covered with a fine glaucous bloom, removed by handling. Leaves glaucous, and the lower ones biternate (or in threes, with each of these in threes again). The flowers, (which have a single spur) are in panicles or compound racemes, and are delightfully variegated with yellow and flesh color.—Rocks, and rocky hills, in Roxbury, Brookline, or near Newton Seminary.—May, August.—Biennial.

EPILOBIUM.

Epilòbium spicàtum Spiked Willow herb. A fine, showy plant, from four to six feet high, and often branching near the top. Leaves willow-like, nearly stemless, veined, undivided, smooth, glaucous underneath, linear-lanceolate. Flowers bluish purple, with four unequal petals, encompassed by a four-leaved tubular calyx. Stamens bent to one side. Seeds feathery, in a long, round, slender capsule or pod. Flowers forming collectively a kind of spike, shaped like the flame of a candle, and frequently eight inches or more in length, and two inches or more in diameter.—Newton, Brighton.—June, July.

ERYTHRONIUM.

Erythrònium americànum, or *E. déns-cànis* Common Erythronium, or May Lily. A delicate and admired liliaceous plant, with its flower growing on a slender, glossy stem, from four to eight inches long. Leaves two, oblong-lanceolate, shining, brownish green, spotted, and sheathing the scape or stem at the bottom. Root a bulb, deep in the earth. Flower a small, drooping, solitary, yellow lily.—In rich, moist soils.—South, Boston, Cambridge, Newton.—May.

EUPATORIUM.

Eupatòrium perfoliàtum Thoroughwort (through wort). About three feet high. Distinguished by having its leaves perfoliate, or perforated by the main stem, which passes through the middle of the leaf, or more properly perhaps, through two opposite leaves, growing to each other at their bases. Stem hairy. Leaves oblong, serrate, wrinkly, downy beneath. Flowers white, forming a corymb or flat top, like yarrow.—Common in low lands, and meadows.—August.

GENTIANA.

Gentiàna crìnita Fringed Gentain. This gentian is exceeded by few, if any, of our indigeneous plants, in the beauty and delicacy of its flowers. Stem round, branching toward the top, and about a foot high. Leaves ovate, lanceolate, acute. Flowers erect, on the ends of the branches, remote from the leaves. Calyx square, with acute angles and segments. Segments of the corolla of a splendid, deep azure, fringed at the top; expanding when the sun shines, but closed and twisted at other times. Grows in damp places.—Concord turnpike; also near Newton Corner.—September, October.

> "Thou blossoms, bright with morning dew,
> And colored with the heaven's own blue,
> That openest when the quiet light
> Succeeds the keen and frosty night"—
> "Then doth thy sweet and quiet eye
> Look through its fringes to the sky."—*Bryant.*

Gentiàna saponària Soap Gentian. A very fine plant, distinguished by its long purple flowers, which are so nearly closed at the top, as to resemble buds. Stem about eighteen inches high, terete or conical, without branches. Leaves opposite, oblong, ovate-lanceolate, sharp-pointed, of a dark, fresh, glossy green, and having from three to five nerves or lines running from one end of the midrib to the other. Flowers sessile or stemless, in bunches at the top, and frequently springing from the shoulders of the upper leaves. Blossoms bud-shaped, dark flower-de-luce color (darker than those of the fringed gentian), variegated with white. Carolla slightly five cleft, its segments subdivided, and folded together so as to close the mouth.—In moist (rocky?) woods, Cambridge, Brighton.—September, October.

GERANIUM.

Gerànium maculàtum Spotted Geranium. "It must be confessed," says Dr. Bigelow, "that a great number of exotic species of geraniums are carefully propagated in greenhouses and parlors, which are altogether inferior to the present very beautiful native." Stem upright, hairy, one or two feet high, dividing and sub-dividing by forks. Leaves divided into three, five, or seven parts, hairy, the upper ones (but not the lower) stemless. The leaves become pale, spotted, as they decay. Flowers purple (two on a hairy peduncle or stem,) with five ovate petals.—Common in somewhat moist soils, about fences, and the edges of woods.—May, June.

GERARDIA.

By far the best way of propagating our gerardias, is said to be from the seeds sown in autumn. The flowers of this genus are shaped much like those of foxglove, and grow in abundance near Mount Auburn.

Gerárdia flàva Yellow Gerardia, or False Foxglove. This species, and the two next, are some of the most showy of our wild wood flowers. Stem hairy, about two feet high, with few, if any branches. Leaves dark, rusty green; upper ones lance-formed, blunt-pointed, with or without serratures or notches; but the lower leaves are often pinnatified or cut-winged, or nearly in the form of a white-oak leaf. Flowers large (for the genus), bright yellow, rather trumpet-shaped, opposite, on a few flowered, terminal spike.—Woods. —August.

Gerárdia glaúca, or *Gerárdia quercifòlia* Fall or Glaucous Gerardia. A taller, if not "handsomer" plant than the last, which it resembles, especially in the form and color of its flowers. Stem from three to five feet high, panicle-like, or divided and subdivided, more or less purple, covered with a glaucous powder. Leaves petioled or stemmed, and of a lighter green (especially on the under side) than those of the Gerárdia flàva; likewise, more pinnatified, or more deeply and finely cut, than those of the G. flàva, which blossoms earlier. Flowers yellow.—Woods.—August.

Gerárdia pediculària Bushy Gerardia. Has a considerable family likeness to the Gerárdia quercifòlia, especially in its flowers; but is much more bushy. About two feet high, much branched, or brachiate-panicled. Leaves oblong, doubly serrate. Flowers bright yellow, and very elegant in their structure. This species may be distinguished from the others, by the five remarkable spreading notched leaves, which are on the top of the calyx, and are complete miniatures (both in shape and color) of the proper leaves on the other parts of the plant. Blossons later than Gerárdia glaúca.—Woods.—August.

GEUM.

Gèum rivàle Water Avens. A fine plant, conspicuous in meadows for its high, nodding, dark-colored flowers. Stem about eighteen inches high, round, erect, drooping at top. Root leaves interruptedly pinnate (as in the compound leaf of the potato), the tip leafet being lobed or parted, and the whole serrate and hairy. Flowers terminal, two or three being on the end of a stalk; with a ten-leàved calyx, reddish brown (or chockolate color), closed with five petals, erect, heart-shaped, hardly rising above the calyx, and variegated with yellow and purple.—Meadows.—May, June.

HEDYSARUM.

Of this we have many species, of which, probably, not more than one or two are worth cultivating for their flowers.

Hedysarum canadénse Bush Trefoil. A tall, handsome species, blossoming before any of the other species in this region. Stem about three feet high, smooth, striate or marked with lines. Leaves ternate, or in threes (like clover), three inches long, oblong—lanceolate; stipules (or appendages to the leaves, at the feet of their stems), thread-shaped. Flowers on racemes (or branchlets at the top of the stem), and from the shoulders of the leaves; the whole forming a kind of loose and somewhat drooping, spiky cluster. Blossoms papilionaceous or pea-blossom shaped, nearly pink, becoming bluish as they decay. Pods flat, hairy, in four or five one-seeded, obtusely triangular joints.—Woods, near Mount Auburn, &c.—July.

HELIANTHUS.

Our wild plants of this genus are miniature sunflowers.

Heliánthus decapétalus. From three to five feet high. Leaves ovate, with a long drawn, sharp point, rough, three-nerved, with teeth (or rather serratures), " few and far between." Flowers large (for the wild genus), yellow, with from ten to twelve rays; scales of the calyx lance-formed, nearly equal to each other, ciliate or fringed with parallel hairs.—Rocky woods, Newton.—August.

Heliánthus divaricàtus Small, rough Sunflower, alias Widow's Rub. Stem erect, round, smooth, generally colored with glaucus powder. Leaves opposite, sessile or stemless, narrow, egg-shaped, rounded at base, slightly serrate, three-nerved, and tapering to a long point. The leaves are extensively rough; for which reason they are said to be sometimes used by ladies to rub their cheeks. Flowers yellow, few in number in the wild plant, but numerous in the cultivated one. Branches of the panicle, either forked or three-parted.—Woods and thickets.—August, September.

Heliánthus multiflòrus. Leaves triply-nerved, rough; lower ones scardate (or heart-formed, with the stem in the hollow), upper ones ovate. Flowers many, yellow, with very numerous rays, and rough stems.—Rocky woods, west part of Newton.—August, September.

HEPATICA.

Hepática trilòba Early Anemone. This lovely, delicate little plant is one of the earliest visiters in the spring. It flowers in sunny spots, before the snow has left the ground. Leaves shining, of a peculiar, dark green; liver-shaped, or heart-shaped at base, and parted into three, rarely five entire lobes. Flowers light blue, or purplish light blue, and sometimes white, and having oblong, obtuse petals, and three broad, ovate, obtuse calyx leaves. The flowers appear on very delicate, downy stems or scapes, before the new leaves are seen, and while some of the old leaves, on long, brown, supple stems, remain green.—A variety, *obtùsa* (at Mount Auburn, &c.), has the lobes of the leaves obtuse; another variety, *acùta* (growing on mountains), has the lobes of the leaves acute.—Woods.—April, May.

HIBISCUS.

Hibiscus palùstris Marsh Hibiscus. A superb plant, (four or five feet high), which at first sight might be mistaken for a hollyhock. Leaves ovate, somewhat three-lobed, green above, whitish and soft, with down underneath; obtusely serrate, with a long, sharp point. Flowers entirely "red" or pink, with axillary stems, longer than the stems of the leaves.—Sides of Charles river, near the Waltham factories. —August.

Yours, E. B. KENRICK.

Watertown, Sept. 9th, 1835.

(*To be continued.*)

ART. VI. *Notices of new and beautiful Plants figured in the London Floricultural and Botanical Magazines; with some Account of those which it would be desirable to introduce into our Gardens.*

Edwards's Botanical Register, or Ornamental Flower Garden and Shrubbery. Each number containing eight figures of Plants and Shrubs. In monthly numbers, 4*s.* colored, 3*s.* plain. Edited by John Lindley, Ph. D., F. R. S., L. S., and G. S., Professor of Botany in the University of London.

Curtis's Botanical Magazine, or Flower Garden Displayed, containing eight plates. In mothly numbers, 3*s.* 6*d.* colored, 3*s.* plain. Edited by William Jackson Hooker, L. L. D., F. R. A., and L. S., Regius Professor of Botany in the University of Glasgow.

DICOTYLEDONOUS, POLYPETALOUS PLANTS.

III. *Ranunculàceæ.*

RANUNCULUS.

Two beautiful ranunculuses are figured in the Floricultural Cabinet for June; they are Tyso's Othello and Waterstone's Maculata Suprema. The former was first exhibited in 1830, when it took a premium prize, and the root sold at *five guineas.* The former is elegant, and the petals arranged with great symmetry; the color very dark, approaching to black. The latter is a white ground, with faint, very regular stripes of purple, down the centre of each petal.

XLVI. *Cácti.*

ECHINOCACTUS.
Eyriesii *Lindl.* Sweet-scented Spiny Cactus. A green-house plant; flowering in January; color of the flowers white; a native of Mexico. Bot. Mag., t. 3411.

A beautiful species "no less remarkable for the great size of its flower, than for its delicious fragrance." Like the Cèreus [Cáctus] grandiflòrus, its splendid flowers open only at night. The stem is subglobose, depressed with twelve or fourteen angles. Introduced to the London Horticultural Society some years since. (*Bot. Mag.*, June.)

LXXVII. *Leguminòsæ.*

PSORALIA.
macrostàchya *Lindl.* Long-spiked Psoralia. A fine hardy perennial, growing two feet high; flowers purple, appearing in July; propagated by seed and division of the roots; a native of California. Bot. Reg., t. 1769.

A very beautiful plant of the Leguminòsæ, obtained from California through Mr. Douglas; it is easily increased by seeds, and will undoubtedly soon become more extensively disseminated. The flowers appear in dense spikes, on axillary peduncles, of a lively purple color; leaves ternate. Drawn from a plant in the garden of the Horticultural Society at Chiswick. (*Bot. Reg.*, June.)

Kennèdia coccínea *var.* elegans, is figured in Paxton's Magazine of Botany for June. It is very beautiful, and "well suited for climbing up a pillar in a conservatory," where it will bloom in great perfection; grows freely in sand, loam and peat.

CXVI. *Rutàceæ.*

BAROSMA.
crenulàta *Willd.* Crenulated Diosma, or Bucku. A green-house shrub, two feet high; flowers blush color; propagated with difficulty by cuttings; a native of the Cape of Good Hope. Bot. Mag., t. 3413.

This "really a handsome" species is an old inhabitant of English collections, and has been known under several different names. It is nearly allied to some of the species of Dióosma, to which genus it has been referred, if, indeed, it is not in reality one. Linnæas describes one as D. crenulàta, which Dr. Hooker thinks, from the description, must be the same, and states his preference to the name. It is possessed of valuable properties as an internal medicine, and is the *Bucku* of the Pharmacopæas. Branches numerous, twiggy; leaves oval-lanceolate, on very short petioles; buds purple, before expanding. (*Bot. Mag.*, June.)

CXXII. *Geraniàceæ.*

In the Floricultural Cabinet for June, six new kinds of geraniums are figured; some of them are exceedingly beautiful; they were taken from flowers furnished by Dennis & Co. of Chelsea, who have a superb collection; the names are Rosa Munda, Magnum Bonum, Dennis's Queen Adelaide, Bancho, Habranthum, Smut, and are priced for 1835 at 10*s.*, 5*s.* 6*d.*, 20*s.*, 3*s.* 6*d.*, 2*s.* 6*d.*

J. D., in the Gardener's Magazine, states that the following, also in flower at the same place, are some of the most select and splendid for this season:—"Dennis's Perfection and Duchess of Sutherland. These two exquisite varieties are rather in one mode as to foliage, umbels of flowers, and shape of blossom, which is bell-shaped; the petals touching, so as to leave little or no vacancy between them: some have compared the flowers to those of an auricula, and the umbel to a truss of them.—Lord Denman: rich dark crimson, with large blackish spots.—Hericart*iànum:* somewhat the color of the last, with larger flowers; the spots on the upper petals not so large.—Augustíssimum superbum: a new variety from France.—Adelina: bright rosy red; blooms very abundantly; habit graceful.—Belvidere: a fine bright red, with peculiarly bright crimson spots.—Banquo: fine red, with large very dark spots.—Amelia: a light pink, with rose-colored spots; flowers very large.—Rosinante: a full-colored rose, with crimson-veined spots.—New Duchess of Clarence: the delicacy of the white of the petals, and the crimson of the spots, in contrast, render this a very pleasing variety.—Medea, a pale rose with large spots.—Habránthum, abounding in its magnificent blossoms.—Weltjie*ànum:* this is called a crimson purple, and has a robust habit.—Fúlminans: dark red; flowers large and numerous.—Black Prince: crimson purple, with very dark spots; lower petals narrow.—Statira, Captain Cook, Margaretta, Incarnàtum, and Don Quixote."

CXXX. *Violàceæ.*

In the Cabinet is figured two fine specimens of the Viola or Pansy, named Rollinson's Princess Victoria and Marsden's King William; they are very fine; the two upper petals of the former are of a very dark color, nearly black; the three lower ones yellow, margined with sky blue; the penciling extends some distance into the petals; it is considered equal to any yet produced; the latter is not much handsomer than many we have seen. The following remarks are appended to the figures:—"Transplanting is only to be safely practised twice in the year, particularly in such seasons as the last, namely, towards the end of April and the end of September. Many fine seedlings were totally lost last year by selecting and removing them from the seed-bed in the summer: the safer plan is to let them remain where they are till they have formed strong plants, and then to separate the roots at either of the times mentioned; the indifferent ones may be removed, but certainly not the best. Propagation by layers or pipings is best done about the last week in May, or early in June; to be resumed in September, when the powerful heat of the sun is on the decline; for it is almost a waste of time and labor either to pipe or lay between those two dates, after the flower-stems have become elongated, dry, and hollow."

DYCOTYLEDONOUS, MONOPETALOUS PLANTS.

CLXX. *Ericàceæ.*

RHODODENDRON.

A new variety is figured in Paxton's Magazine of Botany for June, which was raised from seed by Mr. Knight of the exotic nursery, King's road, Chelsea, who now possesses the only plants. It was produced from the seed of the true R. arbòreum, and is considered a singular deviation from the original color of the species. It is almost white, with the exception of the penciling of the inner base of the petals, which is of a rosy red; the edges are also fringed: it is a grand addition to this magnificent genus. It is named R. arbòrea fimbriàta.

CLXXIV. *Campanulàceæ.*

CAMPANULA.

gargánica *Alph.* The harebell of St. Angelo. A green-house plant, of low rambling growth; flowering in July; color purplish blue; propagated by seeds and division of the roots; a native of Italy. Bot. Reg., t. 1768.

This is a beautiful little species, and a valuable addition to the genus. It is a perennial, growing "wild on Mount Gargano, among the ruins of the ancient Monastery, and near St. Angelo." It will not stand the winter of the English climate, owing to the heavy rains, and humid atmosphere: it may, however, live through ours. The flowers are axillary, on long racemes; corolla deeply five cleft, pale blue inside, and light purple outside; leaves reniform. It flowered for the first time in the garden of Mrs. Marryatt at Wimbleton, in July, 1834. (*Bot. Reg.*, June.)

CLXXXVI. *Compositæ.*

CRASPEDIA (from *fruge*, in allusion, probably, to the appearance of the pappus).

macrocéphala *Hooker.* Large-headed Craspedia. A perennial frame plant, growing about eighteen inches high; flowers white; propagated by seeds; a native of Van Dieman's Land. Bot. Mag., t. 3415.

A "very interesting plant," raised from seeds, by Mr. Curtis of Glazenwood. The foliage has somewhat the appearance of Ammòbium alàtum, "but of a more bluish green, and the smell of the flowers resemble that of honey-comb or of the Búddlea globòsa." Leaves oblong, alternate, short on the stem, but large near the roots. Stem terminated by a large head of flowers. The seeds were collected "by Mr. William Davidson, the curator of the Hobart-town Botanic Garden, on Mount Wellington, at an elevation of three thousand feet above the level of the sea." (*Bot. Mag.*, June.)

CLXXXIX. *Rubidceæ.*

RANDIA (named after Isaac Rand, an English apothecary).
Bowieàna *Allan Cunningham*, Mr. Bowie's Randia. A slender stove shrub; flowers yellowish white; propagated by cuttings; a native of Brazil. Bot. Mag., t. 3409.

"A handsome stove plant," similar in the appearance of the flowers to the Gardènia flórida, but with a very long tubulous corolla. The genus is doubtful, as Dr. Hooker had not the means of examining the fruit. The leaves opposite, oblong, waved, on short footstalks, glaucous green beneath, except on the midrib. Flowers axillary by the branches, striking out immediately beneath. Discovered in 1815, in Brazil, by Messrs. Cunningham and Bowie. The drawing was taken from the Royal gardens at Kew. (*Bot. Mag.*, June.)

CCVII. *Primulàceæ.*

PRIMULA.
palinùri *Jacq.* Palinurian Primrose; a green-house perennial, growing about a foot high; flowers yellow, appearing in March; propagated by seeds; a native of Italy. Bot. Mag., t. 3414.

This is an elegant species of the Prímula; the foliage is very large, and "has a most striking resemblance to that of a luxuriant plant of Sempervìvum arbòreum." "This circumstance, together with the bright yellow corollas, almost pure white, mealy calyces, pedicel, and involucre, and the season of its blossoming (March) render it a most desirable acquisition." The fragrance is similar to the cowslip, but much more powerful. The leaves are from four to six inches in length, obovate, of a pale green color. A native of Palinuri, near Salerno, in the Neapolitan dominions. (*Bot. Mag.*, June.)

CCIX. *Gesnèreæ.*

GESNERA.
allagophylla *De Martius.* Shifting-leaved Gesnera. A stove plant, growing a foot or more in height; flower orange yellow; appearing in summer; propagated like the other species; a native of Brazil. Bot. Reg., t. 1767.

Another beautiful stove plant, and "an interesting addition to the showy and easily cultivable genus to which it belongs." The stem is erect and hairy; leaves in threes, opposite, subsessile, oblong; flowers in a long terminal spike, sessile, hairy, with a short tube. Dr. Lindley is not certain that he has referred it to the right species; if so, it is "a native of the auriferous plains of Brazil, in the province of the mines, in various places, especially about villa Rica, the town of S. Joao d'El Rey, in the Serras da Pires, and da Piedade, and elsewhere." The drawing was made in the garden of the Messrs. Young, of Epsom. (*Bot. Reg.*, June.)

CCXI. *Scrophularineæ.*

PENTSTEMON.
staticifòlius *Lindl.* Sea Lavender-leaved Pentstemon. A hardy perennial plant, growing about a foot high; color of the flowers a bluish lilac; appearing in summer; a native of California. Bot. Reg., t. 1770.

"It is most nearly related to P. diffùsus (fig. in the Register, t. 1132), from which it differs in its much larger and more lilac flowers, in the form of its leaves, and in those next the root being perfectly entire." A beautiful and desirable species, according to the representation of the plate. The flowers are nearly sessile, in cymes or whorls of about twelve each. It is yet "extremely rare." The drawing was made in the garden of the Horticultural Society, in June, 1834. Discovered in California by the late Mr. Douglas. (*Bot. Reg.*, June.)

Appended to this is a revision of the whole of the genera of the natural order Scrophularíneæ. It is from the pen of the learned author of the *Species Labatiarum*, George Bentham, Esq.

CCXX.

VERBENA
multífida *var.* contrácta *Lindl.* Dwarf purple Vervain. A hardy perennial plant; of very low rambling growth; flowers purple, appearing all summer. Bot. Reg., t. 1766.

V. multífida, which has flowered in the gardens in this vicinity, is "one of the commonest of all plants on the Alps of Chili and Mendoza, growing, according to Dr. Gillies, to the elevation of 8000 feet above the level of the sea." It is the V. erinoìdes of *Willdenow*. V. multifida *var.* contrácta now figured, "is a dwarfer and more short-jointed kind, and grows into a very dense patch which has but little disposition to extend itself." It is an exceedingly interesting little plant. Drawn from the Horticultural Society's garden. (*Bot. Reg.*, June.)

Art. VII. *Calls at Gardens and Nurseries.*

Residence of S. Downer, Esq., Dorchester.—Sept. 4th. We here found a large variety of new and choice kinds of fruit trees, particularly pears, in full bearing. Mr. Downer is already well known to the public as one of the most zealous cultivators of new sorts of pears, and more especially so, as being the first person to introduce to the notice of amateurs and nurserymen, many native kinds which have since become generally and extensively grown in gardens throughout this vicinity. To our readers we have no doubt his labors are fully appreciated in his excellent communication in the commencement of our Magazine (81). Ever since the first establishment of the Massachusetts Horticultural Society, Mr. Downer has been much interested in its future prosperity and usefulness; and has been among the first to promote its advancement in regard to a knowledge of the different varieties of fruits in cultivation.

In the garden are upwards of twenty varieties of pears, native and foreign, which will perfect fine ripe specimens of fruit this season, and some of which have never yet been known here, except by the descriptions and figures given in the Pomological Magazine and other works. We may therefore anticipate, that the opportunity is at hand when the correct names of several kinds which have heretofore been cultivated in different gardens under synonymous terms, will be fully ascertained and established. There yet exists much confusion in the nomenclature of fruits, and it is much to be desired that it should be lessened as speedily as possible. Nothing could better convince one of this, than the fact, that some of the trees on Mr. Downer's place have been re-grafted two or three times. Scions were collected from reported good kinds; but at the end of three or four years, when they came into bearing, the fruit was found to be worthless; these stocks were regrafted again, and in many cases a third time, and still the fruit is unfit for cultivation. The practice of cutting scions from trees that have not produced fruit, and the want of attention in labelling these when put into the stocks, has been partly the cause of this; we sincerely hope that this will be con-considered a subject of too much importance not to receive the particular care of gardeners and nurserymen.

Of the native kinds we noticed in bearing, were the Seckel, Bleeker's Meadow, Heathcot, Minot, Andrews, Cushing, Lewis, Fulton, &c. Among the foreign varieties, the Passe Colmar, Beurré Diel, d'Arembery, Beurré Rance, Urbaniste, Marie Louise, Capiaumont, Bezy Vaet, Beurré automne, Saint Ghislain, Lowell, &c. The Dix pear has not yet produced fruit on any of the scions which have been taken from the original tree, except on one in the garden of Mr. Bartlett, Roxbury, where we are informed by Mr. Downer there are three pears growing, of fine appearance. The Cushing pear is a fine variety, nearly equal to any of the season, and a profuse bearer: this and the Saint Ghislain are two valuable kinds. We are sorry to observe several of the fruits on the tree of the Bezy Vaet to discover symptoms of cracking, similar to the St. Michael. The Lowell pear, a seedling raised by Mr. Knight, and named in honor of the Hon. John Lowell, the trees of which were transmitted to him, and the scions subsequently distributed in this country, is bearing on Mr. Downer's place; the tree is very full, and the fruit cracks in the same manner as the last mentioned kind; we hope it will not be a permanent character. It must certainly be a fine fruit, for Mr. Knight would not have selected such a name to perpetuate an inferior one. The Urbaniste, of which there are several trees, look fair and beautiful, and promise to become a most valuable kind. Mr. Downer's trees are mostly old ones engrafted; and are nearly all in bearing. The situation of his garden is high, and the soil a strong rich loam; some of them are almost breaking down with the weight of fruit. We observed several fine trees of the Downer cherry: this is a fine kind, and should be in every garden. Before the return of another season, we hope Mr. Downer will furnish us with more information respecting some other pears.

Residence of Wm. Oliver, Esq.—The collection of fruit trees in this garden is very good. Mr. Oliver has paid considerable attention to horticulture, and having the advantage of a good situation, has some fine specimens of several kinds of fruit, particularly of pears. We noticed the Brocas Bergamot, Saint Ghislain, &c., in addition to others we had not the opportunity of getting the names: we here saw several vines of the Sweet Water grape, with good crops of fruit, which generally were but lightly touched with the mildew; on one or two of the vines the fruit was almost wholly destroyed, but on the others extremely fair, though the vines were trained upon a parallel trellis, with the former at the distance of but a few feet. They were all frequently syringed with lime-water; Isabellas had began to acquire their color, in the same situation.

Mount Auburn, Cambridge.—Sept. 7th. We never enter this beautiful spot without being struck by the elegance of its natural grandeur and beauty. We had not the opportunity to walk through the whole ground, and therefore confine our remarks to the garden apartment. The whole is under the superintendence of our excellent correspondent, Mr. J. W. Russell, who, though almost constantly employed in the concerns of the cemetery, has, by his devotion to floriculture, found time to enrich the garden with a showy collection of annual flowers; the effect of these around Forest Pond is highly striking to persons as they enter the place, and contrasts finely with the sombre appearance of the hemlocks, spruces, firs, white pines, and other evergreens, which line the main entrance for two or three hundred feet. In the garden is a profusion of that showiest and sweetest ornamental annual flower,—the Petùnia nyctaginiflòra; splendid balsams of the spotted, striped, and self-colored kinds; mignonette, stocks, globe amaranthus, &c., patches of in great abundance. Around Garden Pond, Mr. Russell has planted a large number of dahlias of the more common varieties, which are now flowering; they are trained to arched birch sticks, which are thatched together, thus forming a sort of hedge, and effectually protecting them from the wind. In another part of the garden, Mr. Russell has a large bed of seedling dahlias; few of them have as yet flowered; if the frosts hold off until late in the season, a larger part of them will show blossoms; two or three we noticed, which were very double, and of fine colors. The collection of double asters is very good, and placed as they are in the large beds by themselves, they make a magnificent display: the variety of colors is not so numerous as in some collections, being mostly reds. Some few weeks since, we saw in flower at this place four or five species of Aselèpias, among which was purpuràscens tuberòsa, púlchra, phylolaccoìdes, &c.; the specimens were very fine; this singular genus should be more valued by gardeners. Mr. Russell has displayed much taste in the manner of decorating many cemetery lots in a neat simple style, perfectly in keeping with the place, and for which he deserves much credit.

Belmont Place, Watertown, J. P. Cushing, Esq.—Sept. 7th. Improvements are continually going on here, which will make this fine residence one of the most interesting in the country. The garden under the care of Mr. Haggerston, is a perfect specimen of neatness and high keeping. The green-house, stoves and forcing houses, are also kept in fine order. Since our remarks (p. 68), there has been a great change in this department; the graperies which were then unplanted, are now filled with the wood of the vines, which have made a very vigorous growth, and is ripening well. Two houses for peaches, &c., have since been erected, one on each side of the garden, and the young trees are planted out. In the green-house are several fine plants in bloom: Alstrœmèria salsílla was just opening several buds; it is a beautiful species; the beauty of this genus is not sufficiently known by most lovers of plants to be fully appreciated; to us it is one of the most delightful of the Amaryllídeæ; in this same family, Amaryllis belladonna, of which there were several plants, was displaying its umbels of delicate rosy pink flowers. Ixòra crocàta, an elegant species, not so common as I. coccínea, was covered with its cymes of dull red blossoms; Ròchea fulcàta and Cérbera thevèta, Mr. Haggerston stated to us had been finely in flower; the latter a most desirable addition to choice collections; it belongs to the Apocíneæ. In the stoves, the first thing we noticed was a grand specimen of that magnificent bulb, the Crínum amábile; we counted in one umbel, upwards of ten of its lovely blossoms then in perfection; the whole number which had opened, including these, was thirty-two. Hibíscus insígnis, the same species mentioned in our last as flowering at Mr. Lowell's, is here trained to the back wall of the stove, and has produced numerous panicles of its rich flowers; Hibíscus ròsa sinénsis, three double varieties, of, are elegant, with their large scarlet, red and yellow blossoms; Combrètum purpùreum, a most gorgeous stove climber, is here flowering, we suspect, for the first time in this country : its dense racemes of carmine-colored blossoms, have a splendid and imposing appearance. There is a large plant of Crínum augústa, but it does not yet show any signs of flowering. In the pit in the stove are several kinds of pine-apple plants, which are growing vigorously ; among others are the Black Jamaica, Ripley, and Antiguà. Nymphæa pígmea, cærùlea, and lòtus, those beautiful aquatics, Mr. Haggerston showed us several plants of ; they should be grown in every good collection ; we have often been surprised that the water lilies, so charmingly beautiful and fragrant, have not been more valued and cultivated.

In the garden, the sorts of annuals generally cultivated, are blooming strong and profusely. Of those new we noticed Nigélla hispánica, a much prettier species than the old damascèna ; several plants of a species of Cósmea, said to rival the dahlia in splendor, we here observed growing with great vigor, but they will not probably flower before the approach of frost. We never were so much struck with the brilliancy of the Verbèna chamædrifòlia as at this place ; there are two patches of it, each side of the entrance to the conservatory, about three feet in diameter, and its dazzling blossoms were so numerous as almost to cause pain to the eyes to look upon them. In the border, in front of the range of houses, are several plants of the Cánna speciòsa, ten feet in height, with countless spikes of flowers. The dahlias are now flowering extremely well; there is also a profuse display of superb double China asters, of various shades of color. The dahlia, since the latter have been so improved, has a strong rival ; and if the ease with which the asters are flowered is taken into consideration, we are not certain but they are the preferable of the two. Gília coronopifòlia (p. 225) was flowering finely: the centre spike being upwards of five feet high ; we have also lately seen it at some other places in great splendor. Lophospérmum erubéscens, Cobæa scándens, Thunbérgia alàta, and Calámpelis scaber, those favorite climbers of ours, were covered with their charmingly beautiful flowers; the Cobæa, running many feet over the trellises on the garden walls.

In the forcing grounds we saw several fine kinds of melons; among others, the scarlet fleshed rock, silver rock, green fleshed, &c., the seeds of which we had the pleasure of sending Mr. Haggerston, being part of several kinds we imported the past spring; they have proved very valuable additions to our limited number fine ones. Several hundred pots of Keen's seedling strawberries have been prepared for forcing. The whole range of pits will be filled with various vegetables and vines, for early forcing.

Oakley Place—Wm. Pratt, Esq.—We here also found the garden, under the care of Mr. McLennan, kept in a neat state, and the plants in a flourishing condition. The dahlias have flowered well, and now presented a fine display: that fine old variety, the Countess of Liverpool, profusely in bloom, still retains its preëminence among the scarlets, both in form and color. The double asters were also beautiful. Bignònia grandiflòra has flowered superbly here every season for several years. The plant is protected during winter by a covering of dry leaves, hay or straw. Maurándia Barclayàna covered with its dark purplish blue flowers. Several plants of the common tea rose, which have stood in the border three or four years, with only a little protection during winter, have made strong shoots, and were full of buds and blossoms; they may be thus easily grown, and the flowers are finer than when the roots are confined to pots.

REVIEWS.

Art. I. *The Gardener's Magazine and Register of Rural and Domestic Improvements.* Conducted by J. C. Loudon, F. L. S., H. S., &c. In Monthly Numbers. 8vo., 1*s.* 6*d.* each. No. LXIII and LXIV, for June and July.

The first article in the June number is a continuation of Mr. Maddison's "observations on the gardening of Belgium." They are principally confined to the amateur gardeners in and around Ghent. The most celebrated, particularly in stove plants, is M. Mechelynk, the following account of which we extract:

> "His hot-house, like all the others in Belgium, is heavy, and has large panes of glass: but his tan bed, which is edged all round with a broad kerb of granite, is the very pattern of neatness; and the whole culture of his hot-house plants does his gardener much credit. The plants themselves are accounted a first-rate collection; and they certainly form one of which any nobleman in England might be proud. M. Mechelynk's green-house plants are very fine; but neither the houses nor the plants themselves are in such fine order as those already mentioned: it is very evident, indeed, that the gardener does not pay the green-house plants the same attention as he does the stove plants; or perhaps it would require an extra gardener, and more suitable green-houses, to keep them in an equal state of perfection."

M. Verplancke's houses are built of iron, but his collection of plants is rather inferior. M. Huyttens-Kerremans "has a neat green-house." M. Boddaert (of Tronchiennes, a village near Ghent), a respectable farmer, has a fine house of camellias, and one of geraniums. For the successful multiplication of the camellia, Mr. Boddaert is said to be unequalled. "M. Reynders of Brussels," Mr. Maddison remarks, "as far as I can judge from observation, possesses the best gardener in the country. His specimens of large camellias are truly magnificent."

The Ghent Horticultural Society has been in existence upwards of twenty-six years. "I know of no town," observes Mr. Maddison "where the florimania is so strong as in this: persons of all trades and professions must have something to do with flowers; and though the price of plants is moderate when compared with that in England, yet the dealers in flowers and plants in Ghent are innumerable; and how it can answer to a Belgic gardener to cultivate plants for sale, is more than I can imagine."

> "The three first-rate commercial gardeners in Ghent, are Messieurs Verleeuwen, Van Geert, and Verschaffelt: the first of whom (Verleeuwen) is celebrated for his choice collection of plants, obtained chiefly from England; for his obliging manners; and for a liberality in his deal-

ings which ought to recommend him to all amateurs. Every one here, as I before said, is a gardener or amateur; so that it would be impossible to enumerate all the Ghent gardeners by name: but those English gardeners who are desirous of purchasing plants here, ought themselves to come over. Messrs. Knight, Garvie and Tate have already paid this country a visit. The latter sold a quantity of his Azàlea Daniélsii; which, when once it begins to grow, will thrive surprisingly in the fine kind of vegetable mould we have in this country; though, I think, it will be too delicate to stand our winters in the open air. The summers in Belgium are, for the most part, fine and dry; and the autumns beautifully serene, till November. The winters are, however, sharp, dry, clear, and cutting; but healthy for those not subject to pulmonary complaints. The springs are disagreeable, having cold winds with hot sun. In the winter, but very little snow falls. This winter (1884), snow fell twice; but never remained more than three hours at a time on the ground. On the other hand, on Dec. 29, 1829, at ten o'clock at night, Fahrenheit's thermometer, in a northern aspect, fell to 24° below the freezing point."

The *Horticulteur Belge*, a work from which the excellent article at page 209 of our Magazine was first extracted, seems not to be in a very prosperous condition. It was begun by M. Van Houtte, who has since been engaged as collector of rare plants in South America, and was conducted with great ability; his successors seem not to have the same zeal and enthusiasm. Its want of punctuality, Mr. Maddison says, must ultimately prove its ruin; and states, as an instance, that "a number bearing date Jan. 1835, will, perhaps, not appear until April, 1835."

"A great drawback" continues the writer, "to the welfare and prosperity of the Flemish peasantry, is, the custom which the government has of lodging, from time to time, the military upon them, instead of building a cheap kind of barracks for the soldiers. In the winter months, this hardship is not so heavy as in the summer; but, during the busy time of the year (for example, in spring and harvest), when there is a great deal of out-door work to do, the burden is felt most severely; and the Belgic peasant is to be really pitied."

The Ghent green-houses are often injured by the hail and frost; and large squares of glass being generally used, after a severe winter they have the appearance of a chess-board. The Belgian rarely puts in a whole square where one is broken, but patches it up with pieces; thus destroying all neatness and elegance in his plant-structures. The using of large glass is a false economy to save carpenter's work. These are things too little attended to in our own practice of gardening, but which we hope will be carefully guarded against.

Article III, contains some "suggestions for a society for promoting the improvement of the public taste in architectural and rural scenery," called out by a notice which some time since appeared in various papers, of the formation of an Ornamental Tree Society in this vicinity. The article is very good, and the remarks by the conductor, are full of sound sense and just criticism. The following, though written for the reflection of English gentlemen of science and taste, will not be read with the less interest by every lover of public ornament, picturesque scenery, and rural improvement, in this country:

> "The taste of this country is altogether disproportionate to its wealth; and it is very far inferior to the taste displayed on the Continent, among nations comparatively poor. In what other city in the world but London are such interminable lines of dingy, brick houses to be found,without the slightest variation of feature, neither differing in height nor in breadth of front, nor in the number, disposition, or size of the doors and windows? Compare the long streets of first-rate houses in the west end of London, with houses of the same class in Paris, Berlin, Munich, or Petersburgh. By what other nation in the world would such immense sums be spent in erecting public bnildings which are often, soon after their completion, found to be so unfit for the purposes for which they were intended as to render it necessary for them to be pulled down? In the short space of twenty years, we have seen three royal palaces razed to the ground, all commenced during the lifetime of the present generation; and the present palace at Pimlico, we strongly suspect, will soon share the same fate. Is there any other country in Europe where a space situated like the Regent's Park, and of equal extent and natural beauty, would have been planted with so few sorts of trees, and these few so tastelessly disposed? And what shall we say to Hyde Park and Kensington Gardens, which, as far as the kinds of trees and shrubs are concerned, might as well be under the care of a common woodman? Little more can be advanced in favor of the shrubberies in the gardens of the Pimlico Palace, which are filled, for the most part, with the common stuffing of the nurseries. How is it that we can spend a million on a piece of architecture that all men of taste, foreign and domestic, agree to be most wretched, and which is, at the same time, placed in a damp and unwholesome situation, and yet cannot spare a few thousands for planting in a superior manner our public parks and gardens? The answer is easy. The public hitherto have not had a voice in this kind of expenditure. They have not been allowed a voice in any matter of taste, because they were, in a great measure, without taste to gratify. Let this taste, which at present lies dormant in the mass of society, be called into existence by cultivation, and we shall soon see a change in all our public buildings, gardens, and walks. Again, we say that the idea of promoting this object by an association is a most happy one; and we earnestly entreat our correspondents to lose no time in endeavoring to carry it into execution. In this age of coöperation, there can be no difficulty in establishing such a society. It would, in all probability, soon be joined by numbers. Architects would become members of it for the sake of the professional hints which they would receive from the discussions carried on, as well as to keep up their taste to a par with that of the society. Landscape painters and artists generally would also join it for the same purpose. Builders, and all owners of property in and about large towns, and especially the metropolis, would belong to such a society, because what tended to ornament their property would tend also to increase its value. Men of taste would join it for the sake of mental gratification; and a large number from the idea of superiority which is generally associated with the idea of refined taste."

Article I, of the July number, is a continuation of "Notes on Gardens and Country Seats," by the conductor. Interesting as they always are, but we have no room to make extracts. Art. II, is an account of the esculent roots and plants of Van Dieman's Land. It appears that the eatable fruits "are not numerous, and none of them are worthy of comparison with the commonest English fruits." They are the *Solànum laciniàtum* (the kangaroo apple) *Mesembryánthemum æquilateràle* (pigfaces), *Polygonum adpréssum*, &c.

Art. III, is entitled "Remarks on the advantages of having a reserve garden,"—a most excellent and useful paper, evincing a thorough knowledge of the management of plants. It is impossible in any large establishments, especially like some of those in our vicinity, to keep up an interesting and attractive show of plants during either summer or winter, in the garden or green-house, unless the advantages of a reserve piece of ground can be resorted to. The following are the remarks of the writer:

> "The purposes to which a reserve ground may be applied are very numerous; and I will first enumerate such descriptions of plants as should always gain admittance there, as far as I can call them to remembrance. Choice annuals, perennials, and various tender plants for planting in beds or masses, as well as for the general decoration of flower borders, to be propagated and cultivated, and accelerated or retarded, as may be required, so as to produce a long line of succession,as well as a continual gayety in the decorative parts of the grounds. Besides this, the reserve ground is useful for rearing American plants, both for planting beds and borders, for forcing early flowers where they are desired, for keeping pot plants of various kinds from the house during summer, such as some of the New Holland tribes, the *Ericeæ*, the camellias, the *Cácteæ*, the *Geraniàceæ*, &c. Also for pots of lilacs, honeysuckles, peaches, cherries, strawberries, &c., for forcing; and for the cultivation of violets, lilies, and other scented flowers, to please the ladies in the gloom of winter; together with many other plants which I cannot now think of, but which would soon find their way in the reserve garden when once such department was established, to the great relief of the borders of the kitchen-garden and slips, where such plants are generally found scattered in all directions."
>
> "At the moment I am writing (Jan. 6), I have abundance of lily of the valley, in pots, in beautiful bloom; and which I have had continually since the early part a December; Neapolitan violets also, in frames, I have had continually from the beginning of October. Hyacinths, narcissuses, and tulips, from Christmas; lilacs in pots, beautiful little bushes crowded with bloom; rhododendrons, azaleas, sweetbriars; roses, the moss, provins, Smith's noisette, and sanguínea, just coming into flower; together with sparaxises, ixias, gladioluses, and other Cape bulbs, and *Azàlea índica*, just beginning to bloom; and the above articles I shall continue to have constantly in abundance for weeks to come."

We have not the room to devote to many more extracts, but the article (of several pages) contains many original ideas, and is written with a knowledge of principles, and these principles carried into practice. The following directions are given how the garden should be situated, and how the ground within it should be appropriated, the size depending altogether upon the wants of the place; an acre is supposed as the requisite quantity for a large country residence, with green-houses, hot-houses, frames, &c., and in proportion for gentlemen's villas.

For the formation of beds for green-house plants in summer, the following is laid down:

> "The base of these pot beds should be excavated about six inches, and there should be a row of bricks on end on each side of the bed, forming a sound edging; a stone edge would be preferable, but this is not always to be obtained. The edging should rise about three inches above the ground level, and the excavation within should be filled to within two inches of the top with clean sand of any kind. On this the pots may be set, or plunged in it, according to the necessities of the season; and many of the *E*ríceæ, the Epacrídeæ, the Camell*ièæ*, &c., would be found much benefitted by being plunged in it through all excessively hot weather, as we know by experience that many of these tribes are much injured by a very hot and dry temperature. In the sand the mean temperature would probably not exceed 70° at all times, and the pots would be always surrounded by a feeding medium; whereas in the open air, and on the surface, they are of necessity exposed to a heat of frequently 80° to 90°, and surrounded by dry air, or, in other words, by a robbing medium: so much for plunging."

Art. VIII, on Mr. Mearns's coiling system of vine culture, (inserted at p. 60), records its failure, as practised by Mr. R. Fish; the paper should be extensively read, and we shall notice it in our next number.

MISCELLANEOUS INTELLIGENCE.

Art. I. *Domestic Notices.*

Packing of Scions for Transportation. Dear Sirs,—Last spring I received a parcel of scions from Mons. Noisette, of Paris. They were cut in the preceding January, and were packed in the following manner: The cut ends were put into potatoes; the part remaining out (and they were quite long) was surrounded with moss, and all the vacuities filled with it. After having an outer covering of straw, they were put into a bundle containing trees. They came in very fine order; some of the cut ends had grown over considerably, and, in one instance, two of them had united together. *Yours, E. M. R.—Dedham, Sept.* 10th, 1835.

Rare native Plants flowering in the Gardens of this Vicinity.—Cánnæ, Monan. Monogyn.; Cánna fláccida *Roscoe*, S. Carolina,—one of the most strong and delicate of this genus; flowers of pale yellow and of large size; at J. P. Cushing's garden, Belmont Place.

Thàlia dealbàta *Roscoe*, S. Carolina; a fine aquatic, perfectly hardy, and suitable for aquariums, or the margins of artificial ponds. Leaves large, ovate, on long petioles; flower stems nearly five or six feet in height.—September.

Cácti. Icos. Monogyn.; Cáctus suffruticòsus *Nutt.* Stems very broad, ovate; spines large and strong; flowers large, yellow, showy.—July.—Southern States?—at Dr. Webster's, Cambridge.

Compositæ. Polygamia, Necessaria: Sílphium elátum; Carolina. Radical leaves large, cordate, sinuate, alternate; stem eight to ten feet high; flowers pale yellow, in diffuse panicles; a desirable addition to these autumnal plants.—Botanic garden, Cambridge.—September and October.—*Conds.*

Art. II. *Queries, Criticisms, &c.*

Sirs,—I am inclined to think the *insect* you speak of, as attacking the leading shoots of the dahlia, is confined entirely to your vicinity. Here the plants were never before in better condition at this season of the year, and from the appearance of some of the newly imported ones now in bloom, they surpass anything of the kind hitherto seen. I have no hesitation in saying, should a *challenge* be sent from all the different states, Philadelphia alone could carry away the palm for the best 100 flowers.

The *red spider* is subject to some varieties here, it is soon discovered by the color of the leaves, and as easily killed, if syringed every evening with pure water.

A few of the early flowers of the dahlias were plucked to pieces by the lightning bugs lodging in the buds, during the day.—*Yours, &c., P. Q. —Philadelphia, Aug. 17th,* 1835.

Messrs. Hoveys, Sirs—The system I would recommend to be put in practice, in order to be successful in flowering the Yellow Tea rose in a parlor, is, in the first place to procure a young healthy multiflora or Greville rose that has been grown in a pot for some time; in the second place to head the whole of the shoots down within three inches of the top of the pot, encouraging three or four vigorous ones for the purpose of budding; when the wood is strong enough, inserting a bud or *two* in each growth as low down as practicable, also at the time of heading the plant down, to have it re-potted, making use of one half good fresh loam, the other half leaf soil and a portion of sand, observing to give the pot a good drainage; if this method should not give satisfaction, I don't know what will. *Yours, J. W. Russell, Mount Auburn, Cambridge, August* 6th, 1835.

Art. III. *Massachusetts Horticultural Society.*

Saturday, August 22d.—Exhibited. From S. Walker, dahlias, viz. Well's white, Dennisii, Brewer's Paragon of Perfection, Tyso's Matilda, Theodore, double larkspurs, phloxes, Lobèlia speciòsa, Verónica virgínica, double sunflowers, &c. Tiger flowers, hollyhocks, althæas, Kèrria japónica, Phlóx, Rudbéckia, Bignònia rádicans, &c., from W. Kenrick. From Thos. Mason, Calliópsis bícolor, Bignònia rádicans, pinks, larkspurs, Verbèna chamædrifòlia, Sálvia spléndens, &c. From M. P. Wilder, dahlias; viz. Widnall's Granta, Brown's Desdemona, Countess de Ponza, Walter Boyd, Queen Sheba, Goldfinch, Picta formosissima, Queen of the Dahlias, Rammoo Sammoo, Dancer's Helen, Lady Grey, Countess of Liverpool, Widnall's Perfection, Lord John Russell, &c. Flowers from Messrs. Hovey. Cánna speciòsa, Ipomæa insígnis, Stapèlia (sp.?) and specimens of the Gama grass, from the Hon. John Lowell.

From M. P. Wilder, Early Catherine pears. From Charles Bowen, Newton, Early Bergamot pears. From Wm. Stearns, Salem, pears without names. Bellissime d'Ete (Jargonelle), English Juneating pears, and a variety the name lost; Early Bough, Jericho, and White and Red Astracan apples, from B. V. French. From R. Manning, American Red Juneating and Early Bough apples; Skinless and Fondante d'Ete pears.

From Messrs. Winship, Monsieur plum, (No. 49, of the trees presented to the Society by the Messrs. Prince). From Mrs. J. Domett, Boston, Blue Orleans plums.

August 29th.—Exhibited. From M. P. Wilder, dahlias, viz. Sulphurea excelsa, Widnall's Granta, alba pupureata, Earl Chichester, Negro boy, Beauty of Salem, Gordon's Lady Granville, Rose d' Amour, Mrs. Petre, Widnall's Jason, Queen Bess, Duchess of Bedford, Queen Sheba, Brown's Ophelia, Widnall's Prince of Orange, Kentish Hero, &c. &c. From J. A. Kenrick, Tigrídia pavònia, Bignònia grandiflòra, Heliánthus multiflòrus, noisette roses, althæas, and dahlias. From A. McLennan, gardener to Wm. Pratt, Esq. dahlias; viz. Countess of Liverpool, Lord Liverpool, Stephenia, Royal purple, Young's Triumphant, Purple Globe, Queen of the Yellows, Queen of Wurtemberg, &c. Flowers from Wm. Kenrick, Messrs. Hovey, Thos. Mason and the Messrs. Winship.

From S. Pond, white gage and purple plums. From R. Manning, Sugar pears; White Astracan (of Ronalds), White Astracan (of Pom. Mag.) and Calville Rouge d' Ete apples; Italian damask plums. Bell, or English Windsor pears from M. P. Wilder. From E. M. Richards, Benoni and Red Juneating apples, and Catherine pears. From the garden of Wm. Pratt, Esq. Bellissime d'Ete pears. Abbott Sweeting apples and another kind not named, from T. Lee. From Messrs. Winship, a seedling pear from Southboro', sent by J. Burnett; originated on the farm of P. Fay.

September 5th.—Exhibited. From the Botanic garden by Wm. Carter, dahlias, viz. Queen of the Yellows, Dennisii, Tyso's Matilda, Levick's Shannon, Scarlet Ranunculus, Miss Smith, Hanoverian Stripe, Well's White, Amanda, Springfield Rival, Queen of the dahlias, Brown's Ophelia, Magnet, Surprise, Imperiosa, King of the Whites, Washington, Levick's Incomparable, &c.; also, a fine specimen of Hedychium Gardneriànum. From Jos. Breck, Lancaster, Widnall's Village Maid, Transcendent, Widnall's Salamander, Jason, and Perfection, Brown's Ophelia, Margaret's favorite, Barrett's Susanna and many others. From M. P. Wilder, Sally's Emperor, Queen of the Yellows, Queen of the dahlias, Queen Sheba, Beauty of Salem, Goldfinch, Brown's Desdemona, Pavonia, Queen of the Whites, Polyphemus, Negro boy, Walter Boyd, &c. &c. From Messrs. Hovey, Lord Liverpool, Granta, Queen of the dahlias, Duke of Devonshire, Prince George, Foster's Premier, Stephenia, Widnall's Adonis, &c. &c.; also several fine double China asters. From J. W. Russell, Mt. Auburn, double China asters. China asters and a crimson globe dahlia from T. B. White, Newburyport. Flowers from Thos. Mason.

From M. P. Wilder, apples of different kinds; Bergamot (true name unknown), and Julienne pears; White sweet water grapes. From S. Downer, Julienne, Cushing, Bartlett, or Williams's Bonchrétien, and other pears; Williams's Early Red, Pumpkin Sweeting, red and yellow Siberian crab and other apples. From J. A. Kenrick, Kenrick's red autumn apples; Flushing gage, and Smith's Orleans plums. From Mr. Barnard, Dorchester, a new pear. Chas. Bowen, Newton, pears, name unknown. From Dr. Robbins, Roxbury, apples, name unknown. Bolmer's Washington plums from E. Cruft, Boston. From S. Pond, Bolmer's Washington, White gage and Smith's orleans plums. R. Manning, Frankreal d' Ete, and Julienne pears. From Wm. Worthington, pears, name unknown. By William Oliver, St. Ghislain pears, and Cornelian cherries. Fruits from Wm. Vandyne. Presented by Messrs. Hovey, received from Messrs. Downing, Newburgh, N. Y. Muscadine pears, and Scarlet gage plums. From Jos. Strong, Rochester, Magnum Bonum and White gage plums.

September 12th.—Exhibited. From S. Sweetser, forty varieties of dahlias, viz. Queen of the Yellows, King of the Yellows, Widnall's Jason, King of the Whites, Lady Grey, Agrippina, Marchioness of Lothian, Springfield Rival, alba fimbriata, Picta formosissima, Rose d'Amour, Widnall's Chancellor and Granta, Blair des dames, Dennisii, &c. &c. From Robert Milne, gardener to M. P. Sawyer, Portland, seedling dahlias, two or three of which were very fine. From Messrs. Hovey, double China asters, and dahlias of several fine kinds. Flowers from Thos. Mason.

From John Heard, Watertown, St. Ghislain, Johonnot, and a kind of pear the name unknown. From S. Downer, Marie Louise pears. From R. Manning, Bleeker's gage plums and German prunes; Bergamot Rouge, Summer Rose, Musksummer Bon Chrétien and Dearborn's seedling pears. From Mr. Marsh, Quincy, Cushing pears. Johonnot pears and a seedling from Williams's Bon Chrétien (which the committee) called Bartlett's seedling. Pears the name unknown, from Messrs. Winship, from the garden of John Boyd, Newton. From D. Swan, Medford, Williams's Bon Chrétien pears.

The Annual Exhibition of the Society took place on Wednesday and Thursday, the 16th and 17th of September, at the Odeon in Federal street. This place is well suited to the purpose, and was decorated in a style which reflects much credit upon the committee of arrangements. The great height of the Odeon, and its peculiar form, prevented any such display of magnificence and real picturesque beauty as that of last year; but when we speak of the true merit of the exhibition this season, it was far before that of the last; indeed for choice and rare flowers, and for new and excellent fruits it was much superior to the greatest anticipations. The decorations were few but exceedingly neat. The moveable seats in what used to be the pit, were taken away, and a floor laid to prevent the bad effect of the descent towards the stage: all round this in front of the first gallery, white pine trees were placed; and before this a table, three feet wide, filled with flowers and fruits: the centre table running lengthwise, was also filled with fruit. On what was formerly the stage, was erected five circular tables: on the centre one, the largest, was formed a complete pyramid of flowers, at the top of which was two spikes of the Queen's Strelitzia (S. regína) in beautiful bloom; on the outer edge was placed dahlias and bouquets; three of the other tables were filled with superb dahlias, a finer display of which was never made in New England; the other with upwards of three hundred splendid double China aster flowers, and many fine dahlias, among them that gorgeous one, Levick's Incomparable. In the rear of all these tables, and forming the back ground, was a mass of white pines and plants in pots. The view upon entering was delightful and peculiarly striking. In front of the second and third galleries was hung the beautiful paintings of the society, festooned with flowers. The entrance passage was densely filled on both sides with evergreens.

During the two days, it was visited by upwards of three thousand persons, embracing all the fashion and beauty of the city, every one seeming perfectly gratified with the display. But the effect of the exhibition by gas light, was beautiful beyond description: and the crowd which thronged it on the last evening seemed unwilling to leave the spot. The address, by Prof. J. L. Russell, on Thursday, replete with interesting information, was listened to by a numerous and respectable audience.

The fruits were very superior, and the great variety shown, gives cheering evidence that the onward progress of Horticulture is vastly rapid, and the zeal of cultivators undiminished. The sources of information have become more numerous, and the means of advancing greatly increased; and we may with pleasure anticipate the spread of a taste for Horticulture and Floriculture which shall elevate these sister arts still higher in the estimation of the public.

The following report is, as nearly as possible, we believe, correct:

From the Hon. John Lowell, Roxbury, a fine plant, full of fruit of the Cítrus decumàna (shaddock orange) and the Sweet Lemon; the latter quite rare; also, fine plants in flower of Gloxínia maculàta and speciòsa, Gomphocárpus arboréscens, Justícia pícta, Ardísia solanàcea, Begònia argyrostígma and Plectránthus fructicòsus; also, fine cut specimens of Cánna speciòsa, Fícus elástica, and Strelítzia regína.

From the Hon. T. H. Perkins, by his gardener, William H. Cowan, flowers of the Phasèolus caracálla, a rare and singular green-house climber, and a frame work of flowers, on which were suspended a large variety of forced grapes. From H. A. Breed, Lynn, a large bouquet of cut flowers. From Mrs. Norcross, Boston, Myrtus commúnis, Cítrus myrtifòlia, (myrtle-leaved orange) Polyánthes tuberòsa, and a fig tree full of ripe and green fruit. From Thomas Lee, Esq., two large bouquets of cut flowers, which were neatly arranged in beautiful vases; among them were the Calendrínia grandiflòra, Linària genistifòlia, Argemòne Barclayàna, Thunbérgia alàta, Heliánthus autumnàle, Lupìnus mutábalis, &c. &c. From William Pratt, Esq., Watertown, by his gardener, A. McLennan, dahlias, viz.: Countess of Liverpool, Scarlet Turban, Lord Liverpool, Barratt's Susanna, Rosa Constantia, Stephena, and many others; also, bouquets of flowers. From the Hon. E. Vose, cut flowers of various kinds.

From J. P. Cushing, Esq. Watertown, by his gardener, D. Haggerston, fine cut specimens of Cánna speciòsa, and numerous other flowers. From M. P. Wilder, plants in pots, among which were Jambòsa vulgàris, Amaryllis Belladonna, and Johnsònia Acùba japónica, Caméllia rubricaúlis, variegated holley, Jerusalem cherry, &c. Also, a superb collection of dahlias, comprising, among others, Beauty of Salem, Polyphemus, Widnall's perfection, Queen of the dahlias, Jason, Aurora, and Granta; Countess de Ponza, Countess of Liverpool, Brown's Ophelia, Queen of the Whites, Richardson's Alicia, Queen Sheba, Earl of Chichester, Springfield Rival, Belladonna, Negro boy, Agrippina, Gordon's Lady Granville, &c. &c. Also, a vase, containing forty varieties of Chinese, Tea and Noisette roses, including the Triomphe de Bolwiller, Palavacini, anemone, &c.; numerous cut flowers. From J. F. Priest, Boston, a fine large plant of Sálvia spléndens, double flowering Pomegranate, and other plants. From S. Phipps, Esq., Dorchester, Coxcombs (Celòsia cristàta) and other plants in pots, including a large plant of the Solànum ovígerum (the egg plant). By Mr. Thomas Dunlap, from the garden of William G. Buckner, Esq., Bloomingdale, N. Y., a number of new and fine dahlias; among others, the celebrated King of the dahlias, in but one other collection in this country, Negro boy, Countess of Liverpool, Agrippina, Paroquet, Queen of the dahlias, Wilmot's superb, Plutus, Widnall's Granta, and two fine seedlings, raised by Mr. Dunlap;—Diadem, of the form and color of the Countess of Liverpool, and Roscoe, a very fine variety. From Wm. Worthington, Dorchester, several bouquets of flowers, embracing, among others, superb double China asters. From E. M. Richards, Dedham, seedling dahlias;—of very good form and a bright yellow color.

From S. Walker, fine bouquets of flowers and a superb collection of dahlias, viz.: Queen of the dahlias, Tyso's seedling, Miss Pelham, Magnet, Springfield Rival Dennisii, Granta, Countess of Liverpool, Lord Liverpool, Brown's Ophelia, Groombridge's Matchless, Amanda Romulus, &c. &c.; also, a charming variety of the pansy (Viola). From the Botanic Garden, by Wm. Carter, an elegant collection of dahlias; among others, Carter's Seedling, Amanda, Village Maid, Queen of the dahlias, Dennisii, Well's White, Belladonna, Brown's Ophelia, Widnall's Chancellor, Tyso's Matilda Washington, &c. &c.; Mr. Carter, also sent the following rare plants:—Leucadéndron argéntea, Bánksia serrulàta, Acàcia falcàta, Laúrus índica, Vallòta purpùrea, Callistémma lanceolàta, Melaleuca, Clerodéndron, Eleágnus, Diòsma, Gordònia, &c. &c. From J. L. L. F. Warren, Brighton, a number of very fine dahlias. From J. W. Russell, superintendent at Mount Auburn, a large quantity of marygolds, globe amaranthus, double sunflowers, petunia, and other annual flowers. From W. Kenrick, Newton, two plants of Mòrus multicaúlus, the Snowberry, and three plants in pots; also bouquets of flowers. From J. A. Kenrick, cut flowers and bouquets.

From the Messrs. Hovey, Boston, upwards of three hundred blooms of superb double China asters, embracing *twelve* distinct varieties; a number of fine dahlias, viz.: Lord Liverpool, Widnall's Granta, Dennisii, Negro boy, alba fimbriàta, Cassina, Sir Walter Scott, Prince George, Widnall's Adonis, Picta formosissima, Stephenia, Scarlet Perfecta, Springfield Rival, Belladonna, Queen of the dahlias, Levick's Incomparable, &c.; a large bouquet of flowers, containing Gladiòlus natalénsis, Zinnia violàcea *var.* coccínea, Phlox ròseum, Wheelerіàna, americàna, cordàta, and glomerata, Solidàgo altíssima, Euphórbia variegàta, Petùnia phœnícea, &c. From Joseph Breck, Lancaster, a very large and beautiful collection of dahlias, of which the following were a part;—Widnall's Village Maid, Transcendent Widnall's seedling, Widnall's Jason, Queen of the Yellows, Colvill's Perfecta, Magnet, Lord Liverpool, Ophelia, Harpalyce, Wells's Royal Lilac, Countess of Liverpool, and Margarett's Favorite, a very pretty seedling, raised by Mr. Breck. From S. Sweetser, a fine and large number of dahlias, viz.: King of the Yellows, Widnall's Phyllis, Alba fimbriata, King of the Whites, Erecta, Rose d'Amour, Rosea alba, Dennisii, Lady Grey, Springfield Rival, Portia, Globe, Widnall's Chancellor, Commander-in-Chief, &c.; bouquets of flowers, and a specimen of the flowers of Noisette rose Lamarque, a lovely variety of this family. From J. D. W. Williams, Roxbury, variegated holleys and Irish yews in pots, with cut flowers. From D. Murphy, Roxbury, Cycas revolùta, (sago Palm) Vibúrnum tínus, Calla æthiópica, Orange trees, Egg plants, Myrtles, &c. &c., with cut flowers. From Wm. Wales, Dorchester, a beautiful bouquet of flowers, composed of Tea and China Roses, Verbèna chamædrifòlia, &c. S. H. Weld, Roxbury, dahlias and cut flowers. Flowers and plants from John Arnold, Boston. Cut flowers were also contributed, in addition to the above, by B. P. Winslow, Boston, John Richardson, Dorchester, N. Davenport, Milton, Joseph Gardner, W. Farnsworth, Charles Taylor, and John Hovey, Roxbury; Wm. H. Cowan, Cheever Newhall.

The following is the Report of the Committee on Fruits:

By E. Vose, of Dorchester, President of the Society: pears,—Bartlett, Passe Colmar, Tillington, Urbaniste, Wilkinson, Cushing, Capiaumont, Maria Louise, Lewis, Mouille Bouche, or Verte Longue; peaches,—Grosse Mignonne, Early York; melons,—Persian Muskmelon, Green fleshed Centaloupe; also, a basket of various kinds of fine fruit. R. Manning, of Salem; pears,—Summer Rose, Bowdoin, Raymond, Saunders' Beurré, St. Ghislain, Autumn Superb, Rouville, Buffum, Cushing, Verte Longue, Lowrie's Bergamott, Washington, Pope's Scarlet Major, Julienne; plums,—Breevort's Purple Bolmer, Lake Green Gage; apples, Rambour Franc, Alexander, Lyscom, New American Crab. Samuel Philbrick, of Brookline, pears,—Bezi Vaet, Andrews, Capiaumont, Colmar Souverain, Verte Longue, Wilkinson, Washington, Seckel; Rareripe peaches. Nathaniel Davenport, of Milton, Chelmsford pears; Snow peaches. A. D. Williams, of Roxbury, pears,—Capiaumont; apples,—Porter, and three handsome varieties of the Red; peaches,—Golden, Purple Clingstone.

Samuel Downer, of Dorchester, pears,—Bezi Vaet, Napoleon, Beurré Diel, Fulton, Bleecker's Meadow, Capiaumont, Lewis, Andrews, Urbaniste, Cushing, Heathcot, D'Aremberg, which has sometimes been confounded with the Gloux Morceau, St. Ghislain, Lowell, Williams's Bon Chrétien (*Bartlett*), Catillac, Iron Pear, Beurré Knox and branches of the same, Seckel and branches of do., Crassanne, Golden Beurré of Dr. Holbrook; apples,—Fine Red, Old Pearmain, Pumpkin Sweet, Porter, Ram's Horn (*fine, red*), Fall Pippin, Red Siberian Crab and Yellow Siberian Crab, with branches of both varieties, Lady Apples, Nonsuch, Winter Sweet. Joshua Gardner, of Dorchester, apples,—Fall Pippin, and branches of Siberian Crab; pears,—Seckel. Marshall P. Wilder, of Dorchester, pears,—Williams's Bon Chrétien (*Bartlett*), Bergamotte; apples,—two varieties, both fine; melons,—True Persian Housaine Muskmelon (striped, the seeds from the London Horticultural Society, and believed to be the first of the kind produced in the country), Lord Gardner's Green fleshed Muskmelon.

John A. Kenrick, of Newton, pears,—Seckel, Williams's Bon Chrétien (*Bartlett*), Chelmsford, Beurré Knox; apples,—York Russets, and some other kinds; peaches,—Alberge, Red Rareripe, Sweet Water, Cooledge's Favorite. John Mackay, of Boston, for Henry Flagg, of Weston, apples,—four baskets of Hawthornden, beautiful; pears,—four baskets of Seckel, two do. of Heathcot. Michael Tombs, of the Faneuil Hall Market, pears,—Hannas, a fruit which has never, to our knowledge, been exhibited, and believed to be a native, much like the St. Michael's, but, to appearance, more oblong, and of larger size; Cushing, from the original tree, which, in a dry and gravelly soil, produces from sixteen to twenty bushels this season. Madame Dix, of Washington street, Boston, pears,—Bon Chrétien, Dix, Old St. Germain. Dr. S. A. Shurtleff, one of the Vice Presidents of the Society, Pemberton Hill, pears,—five baskets of St. Michael's raised in his garden in the city,—Rousselette de Rheims, Fall Bergamotte, Gansel's Bergamotte; apples, —High Top Sweeting; Grapes,—four baskets of Chasselas.

Dr. Zabdiel B. Adams, of Boston, pears,—Seckel, St. Michael; White Imperial or Yellow Egg plum. William Oliver, of Dorchester, pears,—St. Ghislain, Wilkinson, Broca's Bergamotte, Williams's Bon Chrétien (*Bartlett*); apples,—Chataigne or Chesnut apple; melons,—Cantaloupe, Persian Muskmelons. E. Train, of Weston, apples, a specimen resembling in exterior the Alexander. R. & E. Marsh, of Quincy, pears,—Cushing; specimens about as fine as those which were exhibited the Saturday previous, four of which weighed twenty-one ounces. S. Phipps, of Dorchester, pears,—Williams's Bon Chrétien (*Bartlett*), Seckel; apples,—Fall Pippin, Spice apple. E. Bartlett, Roxbury, one of the Vice Presidents, pears,—Bartlett or Williams's Bon Chrétien, Capiaumont; apples,—Maiden's Blush, Ribston Pippin; plums,—Purple Gage, New Gage; Peaches, some fine specimens. Dana & Norcross, of the Faneuil Hall Market, pears,—Williams's Bon Chrétien, Cushing, Harvard; peaches,—Cooledge's Favorite; other baskets of pears and fine fruit.

William Worthington, of Dorchester, pears,—Capiaumont, Monsieur Jean, Warden, Minot, Roussellette de Rheims, Seckel, St. Michael, Williams's Bon Chrétien or Bartlett, Native Red Cheek, Pound pear, and several other kinds; apples,—Ladies' Delight, Carhouse. Richard Ward, of Roxbury,—Roxbury Russets, growth, of 1834, and Sweet apples; pears,—Williams's Bon Chrétien or Bartlett, Seckel; peaches,—Cooledge's Favorite, Red Rareripe, Yellow do. Charles Stone, of Watertown, peaches,—Yellow Rareripe, Stone's Favorite, in all eleven baskets. Amos Bemis, of Waltham, peaches,—Carolina Rareripes. Mrs. Deuch, of Derne street, Boston, Yellow Rareripe peaches. E. M. Richards, of Dedham, pears,—Verte Longue, Harvard, Chelmsford; apples, —Red Juneating, Benoni, the last always fine; Summer Pearmain, Orange-Sweeting. B. V. French, of Boston, pears,—Williams's Bon

Chrétien or Bartlett, Cushing, Wilkinson; apples,—Hawthornden, Ruggles' apple, Downton Golden Pippin, Native Sweeting, Kerry Pippin, Yellow Bellflower, Dutch Codlin; Grapes,—Morillon Noir. Mr. Slack, of Roxbury, pears,—Bartlett, Andrews, and another variety; apples,—a large and handsome variety; peaches,—three baskets of Andrews. William Dean, of Salem, pears,—Beurré Colmar d'Automme, a new, valuable, and most productive variety.

Messrs. Hovey, pears,—Johonnet, Williams's Bon Chrétien or Bartlett; also, peaches and nectarines, raised in pots; semi-amia plums. P. May, of Boston, pears,--Golden Beurré. S. Sweetser, of Cambridge, pears,—Bon Chrétien. Cheever Newhall, of Dorchester,—President peaches. David Hill, of West Cambridge, peaches,—Lemon Rareripe, Orange peach. William Gridley, of Boston, plums,—a limb of beautiful fruit of the Magnum Bonum, a kind suitable only for preserving and for show. Samuel Heath, of Roxbury,—a basket of beautiful Andrew pears. E. W. Hayward, of Mendon,—a basket of fine peaches. Mrs. King,—two baskets of fruit. Mrs. Timothy Bigelow, of Medford,—some specimens of peaches, very fine. Mr. Timothy Bigelow, of Medford,—Bon Chrétien pears.

William Wales, of Dorchester,—Black Hamburgh grapes. Thos. Mason, of the Charlestown Vineyard, peaches—Royal George, Bellegarde; nectarines,—Elruge, Brugnon, a native, both kinds very beautiful; grapes, —Chasselas or Sweetwater, Black Hamburgh, of the second crop. Benjamin Seaver,—Sweetwater grapes and peaches. Jacob Tidd, of Roxbury, grapes,—two bunches of Regner de Nice, very large, one weighing 2¾ lbs. and the other 2½ lbs.; also, three bunches of Black Hamburgh, one weighing 2 lb. 6 oz., another 2 lb. 15 oz., and another 3¼ lbs. Joshua Child, grapes,—Morillon Noir. Benjamin Guild, of Brookline, plums,—White Gage; grapes,—Black Hamburgh, raised under glass, but without fire, Sweetwater, raised in Brookline, in the open air, on a common trellis; all large and fine. John Arnold, Cambridge street,—Sweetwater grapes, raised in open culture in the city. Charles Taylor, of Dorchester,—a large basket of Black Hamburgh grapes, very fine. Joseph Balch, pears, —Green Catharine, and another for the Cushing; apples,—Benoni, and a yellow variety from England; twice bearing red raspberries; fine specimens of peaches; grapes,—Black Hamburgh, White Frontignac.

T. H. Perkins, from his magnificent and spacious glass-houses in Brookline, peaches,—Noblesse, Early York, French Gallande, Grosse Gallande; also, Red Roman nectarines, all very beautiful; grapes,—White Passe Musque, Black Lombardy, White Sweetwater, Black Frankendale, White Muscat of Alexandria, Black Hamburgh, White Syrian, Black St. Peter's, White Frontignac, Black Frontignac, Grizzly Frontignac, Black Cluster or Meunier, Barcelona Long White. These were beautifully arranged in clusters of different colors alternate, and with a fine effect. Such a variety of the superior kinds has never been displayed, we believe, at any former exhibition. All were grown by the skill of Wm. H. Cowan. From the same source a rare variety of squash was sent for exhibition. Samuel Phipps, of Dorchester,—specimens of Valparaiso squash; also, Autumnal Marrow do., and Egg Plants. Dennis Murphy of Roxbury,—Lima Squash; also, fine specimens of the Purple and White Egg Plants.

Next to the altar, the end of the centre table was graced by a large and beautifnl Orange Tree, loaded with its large and golden fruit, intermixed with others unique, and in every stage of their growth. This was from the green-house of the Hon. John Lowell.

September 19th.—Exhibited. From S. Walker, Roxbury, dahlias, viz., Queen of the dahlias, Tyso's Matilda, Magnet, Countess of Liverpool, Amanda, Romulus, Lord Liverpool, &c.; Verbèna chamædrifòlia, Verònica, &c.

From E. M. Richards, American Summer Pearmain apples. From William Pratt, Esq., Watertown; specimens of pears, names unknown. From R. Manning, St. Ghislain; Julienne, Bloodgood, and Summer Rose pears. From Aaron Baldwin, Boston, specimens of peaches, names unknown. Peaches from L. B. Dench, Boston, names unknown. From M. Tombs, Boston, Hannas' pear, supposed to be a native; it is a fine kind.

Art. IV. *Essex County Natural History Society.*

This Society held an Exhibition of dahlias and other flowers, in Salem, on Friday and Saturday, the 18th and 19th of Sept. 1835; the following account of the same we extract from the Salem Observer. We have but room to name only the dahlias.—*Conds.*

From Francis Putnam, dahlias, upwards of one hundred varieties, viz. Levick's Incomparable, Henrietta, Profuse Lake, Queen of the Yellows, Beauty of Salem, Feathered light crimson Globe, Countess of Liverpool, Picta formosissima, Jaune Insurmountable, King of the Purples, Douglas's Augusta, Blanda Perfecta, Tully's Emperor of the Yellows, Widnall's Perfection, Alba pumila, French White, Amanda, Russell's Maculatum, Barrett's Susanna, Guttata Major, Wells' Calypso, Dwarf Golden Yellow, Flamed Yellow, Duchess of Bedford, Mrs. Talbot, Lutea purpurea, Lady Fitzharris, King of the Whites, Putnam's Picta, Earl of Sandwich, Agrippina, Gordon's Lady Granville, Scarlet Ranunculus, Amelia, Marchioness of Lothian, Queen of Roses, Beauty of Wickam, Village Maid, Belladonna, Antonia, Red Globe, Rubicunda formosa, Widnall's Granta, Neptune, Remus, Prince George of Cumberland, Yellow Turban, Beauty of Surry, Lilac Versicolor; Coccinea perfecta, Painted Lady, Algernon Sidney, Putnam's Lady Arabella, Vestal White, Scott's Defiance, Walter Boyd, Royal Orange Globe, New Scarlet Anemone, Marginata, Le Brilliant, Paragon of Perfection, Beauty of the Vale, Lord Liverpool, Queen of Belgium, Dennisii, Barrett's King, Changeable Yellow; Large Crimson Anemone, Sulphurea Excelsa, Sulphurea Alata, Fusca Rubricata, Sulphurea Perfecta, Tenebrosa linea, Royal Orange, Squibb's Pure Yellow, Cormack's Coccinea, Scarlet Perfecta, Alba Purpurata, Dennisii coccinea, Queen of Whites, Countess Plater, Miss Hester, Lord John Russell, Rosa Constantia, Princess of Naples, Lady Grantham, Crimson Floribunda, Pulen, New Blush, Cicero, Queen of Spain, Widnall's Black Prince, Reform, Well's Suberb Quilled Purple, Galanthus, Mountain of Snow, Fulgid asanguinea, Duchess of Kent, Queen of Naples, Picotee, New Goliath, Bonny Dee, many bouquets of quilled asters, stocks, chrysanthemums, euphorbia, verbena, &c. &c.

From Benjamin Creamer, dahlias, Lord Lyndhurst, Barrett's Susanna, King of Purples, Agrippina, Putnam's Beauty of Salem, Painted Lady, Dennisii, Lutea Purpurea, Theodore, Countess of Liverpool, Wells's Calypso, Widnall's Perfection; also, Asclepias curasovica, Malope grandiflora, Dracocephalum virginicum, Helianthus Multiflorus, globe amaranthus, noisette and other roses, bouquets of asters, stocks, chrysanthemums, lobelia, &c. &c. &c.

From J. Fiske Allen, dahlias, a number of varieties, such as Countess Plater, Countess of Liverpool, Wells's Calypso, Dennisii, Theodore, Cormack's Coccinea.

Art. V. *Quincy Market.*

Roots, Tubers, &c.	From $ cts.	To $ cts.
Potatoes:		
Common, per barrel,	1 25	1 50
per bushel,	62	75
per peck,	17	25
Chenangoes, per barrel,	1 50	1 75
per bushel,	75	
Sweet potatoes, per bushel,	1 50	1 75
Turnips, per bushel,	50	75
per bunch,	4	6
Onions, per bushel,	62	75
per peck,	20	25
per bunch,	4	6
Beets, per bushel,	62½	75
Carrots, per bushel,	62½	75
Parsnips, per bunch, (6 each)	12½	17
Horseradish, per pound,	8	12
Shallots, per pound,	20	
Garlic, per pound,	14	
Cabbages, Salads, &c.		
Cabbages: per dozen.		
Savoys,	50	75
Drumhead,	50	75
Brocoli, each	25	50
Celery, per root,	6	12
Beans: shelled.		
Sieva, per quart,	12½	
Lima, per quart,	17	20
Cranberry, per quart,	10	12
Common white, per quart,	none.	
Sweet Corn, per dozen ears,	8	10
Tomatoes, per half peck,	12½	
Peppers (for pickling), per lb.,	3	3½
Spinach, per peck,	none.	
Egg plants, each,	6	12
Squashes and Pumpkins.		
Canada crookneck, per cwt.,	1 50	2 00
Common crookneck, per cwt.	1 00	2 00
Pumpkins, each,	12½	17

Pot and Sweet Herbs.	From $ cts.	To $ cts.
Parsley, per half peck,	25	
Sage, per pound,	37	50
Marjoram, per bunch,	25	37
Savory,	25	37
Fruits.		
Apples, dessert:		
Common, per barrel,	1 25	2 00
per bushel,	62½	75
Porter, per barrel,	2 00	2 25
per bushel,	1 00	
Pears:		
Seckel, per half peck,	50	1 00
St. Michael's, per half peck,	50	75
Cushing, per half peck,	75	1 00
Capiaumont, per dozen,	75	
Bonchrétien, per dozen,	20	25
Plums:		
Green Gages, per quart,		
Damsons, per quart,	none.	
Common, per quart,		
Quinces, per bushel,	3 00	3 25
Peaches, best, per dozen,	37	50
Cucumbers, per dozen,	20	25
—— (for pickling), per 100,	30	83
Pine Apples, each,	25	50
Grapes:		
Black Hamburgh, per pound,	50	75
White sweet water, per lb.,	37½	50
Isabellas, per pound,	25	
Watermelons, each,	12½	50
Muskmelons, each,	12½	50
Barberries, per bushel,	75	
Cranberries, per barrel,	6 00	6 00
—— per bushel,	2 00	2 25
Oranges, per box,	3 75	4 00
per hundred,	2 75	3 00
Lemons, per box,	4 00	
per hundred,	1 25	1 50
Almonds, per pound,	12	14
Filberts, per pound,	4	6

Remarks. The demand for potatoes has increased considerably since our last report; they have come in of excellent quality. Turnips are now plenty, and of fine size. Onions are very abundant; few if any old ones now remain on hand. Beets and carrots are now brought in of full size. Very few parsnips have as yet come in. Horseradish, though not of excellent quality, is rather plenty. Cabbages are very large and good this season. The first fine brocolis we have seen, have come to hand the past week; they sell quickly at quotations. Sieva and Lima beans are tolerably plenty; the latter will be more so, if we have no early frosts. Tomatoes are in much demand, and a far larger quantity, we have no doubt, has been sold this season than any previous one. Egg plants are not yet much esteemed. Squashes are good, and remarkably cheap in price. Of apples the stock is plentiful; fine Porter's sell readily; the price of common kinds is very variable, according to excellence. Pears have been plenty throughout the season, and that fine kind, the Seckel, much more abundant than heretofore. It is with pleasure that we state that some of the new kinds, as the Capiaumont, Cushing, &c., are now to be seen in the market; St. Michael's are good this season, and some very fine ones have sold for a dollar the dozen. Bartlett's have been plenty since our last; but they are now gone. Peaches are rather scarce; good ones selling readily at our prices. A few quinces have been brought in. There are but few cucumbers, except those used for pickling; the price of the latter has advanced a shade. Grapes are quite abundant, of excellent flavor, and very reasonable in price; Isabellas are rather scarce. Cranberries have come to hand, but not sufficiently plenty to be sold very low; the quantity that will be gathered is yet uncertain.

Boston, Sept. 22. M. T.

ART. VI. *Meteorological Notices.*

FOR AUGUST.

THE latter part of the month of August was accompanied with beautiful weather; and the month throughout was exceedingly fine. Showers were frequent, though there were but two rainy days.

THERMOMETER.—Mean temperature, 63° 20′. Highest, 83°; lowest, 44° above zero.

WINDS.—N. E. two days—E. two—S. E. three—S. seven—S. W. ten—W. six—N. W. one day.

Force of the Wind.—Brisk, twelve days—light, nineteen days.

Character of the Weather.—FINE, eleven days—FAIR, fifteen days—CLOUDY, five days.

Rainy, two—*Showery*, ten days.

MONTHLY CALENDAR

OF

HORTICULTURE AND FLORICULTURE,

FOR OCTOBER.

FRUIT DEPARTMENT.

Strawberry beds that were planted last month should be kept free from weeds, and if dry weather ensues, they should be occasionally watered (p. 299).

Grape vines in the open air should now be pruned of all lateral branches and strong tendrils, in order to let the sun and air to the wood, to ripen it well. Those in the green-house or grapery will now have nearly perfected their wood; prune off all superflous shoots, and if the grapes are all cut, give a great deal of air to the house, (pp. 46, 93, 125, 170.)

FLOWER DEPARTMENT.

Green-house plants should all be housed this month. Let the pots be washed, and such plants as want it, re-potted before they are put in.

Oxalises of the different species should now be planted in pots, and placed in the green-house.

Cyclamens should also be potted, and placed in the green-house or frame.

Chrysanthemums will have now advanced their flower buds, and should be protected from frost, as it tends to injure their flowering materially (p. 138).

THE
AMERICAN
GARDENER'S MAGAZINE.
NOVEMBER, 1835.

ORIGINAL COMMUNICATIONS.

Art. I. *On the Construction of Brick Pits for early Forcing; to which is added the Cultivation and forcing of the Cucumber; taken from Horticultural Memoranda, and exhibiting the State of their Progress from January until September.* By the Conductors.

The early forcing of the cucumber, is, as yet, but very little practised among amateurs or gardeners in this country. Whether this arises from the impression that they are not easily grown, and without great expense, or from a dislike to the fruit during the early spring months, we have not the means of ascertaining; but we suspect most probably the former: it cannot be from a dislike to the fruit, as it is generally esteemed during the summer months, and the prices, which the few that are to be found in our markets in March and April, command, convince us that they are valued equally with other luxuries of that season. It must be then, that, from preconceived erroneous ideas in relation to the difficulty of their culture, and of the great expense attendant upon the same, amateurs and gardeners have been prevented from bestowing upon them that equal care and attention which they give to other fruits, far less worthy, and which will not near as well repay the latter for their trouble in bringing them to perfection.

Among the English gardeners, it is an object of the first importance, and one in which emulation is, or has been, carried to the highest pitch, in the production of the finest and most excellent specimens of this fruit. The humblest tradesman has his cucumber bed. In truth, an English gardener was formerly considered as wanting in one of the most difficult parts of his profession, if he was not well acquainted with the forcing, and successful management, of the cucumber. Numerous books have been written by eminent practical gardeners, wholly upon their cultivation; and although there has been much useless information mixed up with that which was really desirable, still, the peculiar climate which English gardeners have to contend with, so unfavorable to that of our own, especially for forced fruits, has caused the want of those minute particulars, without which they would not so speedily have arrived to that degree of perfection in forcing, which at the present time they enjoy.

We have not the opportunity now, to speak so fully of the climate of the two countries, as regards their adaptation to forcing, as we should wish; but it is apparent to all who have read, and from reading deduced correct opinions, that the bright and long continued sunshine which we are so bountifully favored with, during even our most intense cold weather, is not to be put in comparison with the dull, foggy and damp climate of our transatlantic neighbors, so decidedly unfavorable for early forcing.

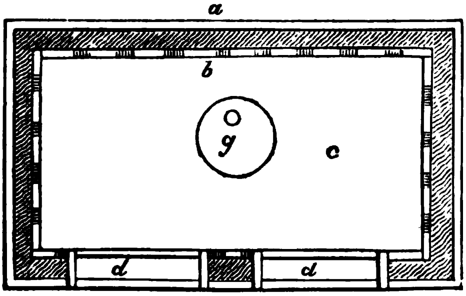
We do not pretend to say that the art of forcing cucumbers is to be acquired without any labor or experience; nor indeed, an art which admits of being successfully practised without care and great attention, and without a good fund of information stored up, by reading the results of practical men; but with the latter, and good judgment, it may be practised profitably and successfully, by any individual who has the desire, and is ambitious to possess such a luxury as the cucumber during the winter season.

The methods of forcing are various, and all have, in the opinion of the inventors, their peculiar advantages; that which was first and longest pursued, and which is here mostly in use, was their growth in dung beds; that is, the plants were raised on beds formed by a large quantity of horse manure, which, in its state of decomposition, gave out heat sufficient to bring the fruit to maturity; then succeeded brick and wood pits, heated by linings of manure, fire flues, steam, hot water, &c.; but nothing has yet been found so congenial to their nature as the heat produced from manure. M'Phail, Knight, Nairn, Atkinson, Haythorn, Kendall, Weeks, West, and other eminent amateurs and gardeners have published plans and descriptions of their improvements in the construction of pits, each of which have had their merits fully set forth in the Transactions of the London Horticultural Society, and the Gardener's Magazine. The principal objection to the old dung bed is, that it generates too much steam, and consequently there is always an excess of dampness, which, accompanied with the humid atmosphere of Britain, is greatly injurious to the health and vigor of the plants; to obviate this, the other methods were adopted, and they have been so improved upon by the practical men we have just named, that but a small portion of time and care, compared with that formerly required, is necessary to fruit the cucumber successfully.

Several years since, we wished to erect one of these pits; after a careful and particular examination of the advantages of each, we came to the conclusion to build one on the principle of Mr. West, but with many and very material alterations, which we still think great improvements upon the system. We have found it to answer every purpose, and forcing can be carried on from January to January again, without the slightest interruption from snow and severe cold. It would be occupying too much time to attempt a description of Mr. West's pit—and perhaps we should not be understood without the aid of engravings; we therefore defer this, and give the following plans of the one we have had erected, and which we have had constantly in use; afterwards stating, as briefly and explicitly as possible, the alterations we have made from that of Mr. West.

The pit (*figs.* 21, 22 and 23) is nine feet six inches in length, and five feet six inches wide, measuring from the outside; the back wall is six feet six inches, and the front, five feet six inches high. The sashes are three in number, each two feet ten inches wide, and four feet eight inches long, and are each set with four rows of seven-by-nine inch glass. The pit is built of brick, and both the outer and inner walls are laid with them on the edge, as in the plan (fig. 21, *a b*).

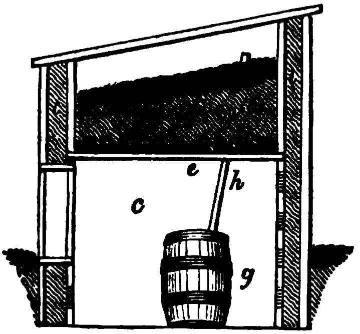
21



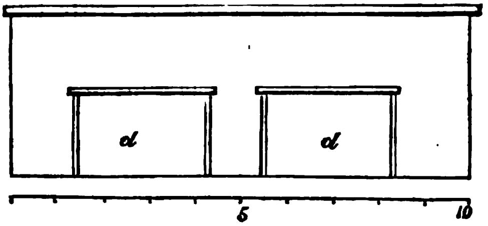
Underneath the earth of the bed, is a chamber (*c*), in which is to be introduced manure, when ready for forcing, through the doors in front (*d d*). Over this chamber, and resting in the perforations in the inner wall, are placed strong pieces of joist, or plank (*fig.* 22, *e*), of the thickness of about two and a half inches by three, at the distance of one foot from each other; on these, slate stones (which are preferred), brush or small sticks are laid, covered with two or three inches of dry leaves, on which to place the earth (*f*), and prevent its falling through the interstices of the stones or brush. In the centre of the chamber is placed a half barrel or large keg (*g*);

from this a lead pipe, two inches in diameter (*h*), is conducted through the soil of the bed, and through which hot air continually ascends. The inner wall (*b*) is built in what is generally termed the pigeon-hole style; that is, with perforations, as seen in the ground plan, and section (*fig.* 22). Through these perforations the hot air and steam from the dung escapes, and circulates all round the soil of the bed, in the flues (*i i*) formed by the two walls. The doors through which the dung is introduced, as seen in the front view of the pit (*fig.* 23, *d d*), are two feet eight inches wide, and twenty inches high, and are made fast when up, by a hook and staple or by a large button. They should be made of two inch plank; inner doors may be used, but they are not essential, except in the most severe weather. The pit is sunk two feet in the ground, and the bottom of the doors are made level with the surface, or sunk only a few inches. The outer and inner wall, with the flue, is covered with a course of bricks laid flatwise: in this course is laid, with mortar, several pieces of wood of the same shape and size of the bricks, to which a plank coping is to be fastened; this coping should be ten inches wide, thus extending one inch over the brick work outside and inside of the pit. The whole, when finished, will have as neat an appearance as any green-house, and the forcing ground can be kept clean, and in a style corresponding with any part of the garden; generally, this department has been thrust into some corner, and if the dung bed system is pursued, it always should be; for it is impossible to preserve any thing like cleanliness where much forcing is carried on. This pit obviates one of the most objectionable things in dung beds.

22



23



In Mr. West's pit, there are four doors, two in the back, and two in the front wall; instead of the inner wall being built with perforations, it has only a row just under the bars on which the soil, &c., is placed; the flue only runs up as high as the surface of the earth in the bed; and in the back wall are two holes fitted with plugs to regulate the heat; there is also some other minute variations, but these are the only ones of any consequence. We think that there is no necessity of four doors, having found two sufficient for every purpose, and in our severe climate, considerable heat would escape from the crevices around them. The dung can be easily put in from the two front ones. The advantage gained by having the inner wall perforated up to the bed is very great; as the heat from the dung escapes with greater facility than through merely one row. This alteration was first suggested by Mr. Loudon. The two walls being carried up to the coping, is another essential thing here; as the air in the bed is thus prevented from great fluctuations, from variations of the atmosphere during winter; the holes in the back wall are, we think, superfluous, as, in this kind of pit, the heat can be regulated without scarcely any trouble; and there is no danger of its being too powerful. In West's pit, half of the chamber, longitudinally, is filled at first; in ten or twelve days the other half is filled. When the heat of the first is exhausted, it is replaced with fresh dung.

The difference in the two pits will, we apprehend, be quickly perceived. In ours, much more heat is gained, and a great saving of labor; we are in doubt whether one erected on Mr. West's plan could be worked in the earliest part of the winter season. The half barrel or keg which we place in the centre of the chamber, is intended to conduct hot air into the bed; the heat would escape slowly from the mass of dung, and if a pipe was carried direct from the chamber, the steam and impure air would be injurious to the plants; but the air in the half barrel becomes heated and ascends free from impurity. If at any time the heat is not wanted, the pipe can be stopped with a plug. In severe cold nights, it obviates the necessity of a thick covering to the sashes. It is temporary, and can be dispensed with in late forcing.

When this pit was built, we believe there was nothing of the kind, not even a common brick one, in this vicinity; lately, however, at Belmont Place, and Mr. Perkins's in Brookline, several ranges have been erected on M'Phail's and other systems, and they are becoming more common among amateurs and gardeners. One improvement in our pit we would make, which should be to lay the outer wall with the bricks flatwise; sudden changes operate rather too powerfully when laid edgewise; to guard against this, in January and February, we had a frame of wood work put up on the ends and back of the pit, at the distance of four inches; the space was filled with dry leaves or hay; the top was covered with a board to keep out the wet; the whole can be taken away in March ; if it is built neatly, it may remain without in the least diminishing the beauty of the pit.

Having given these details, which we hope, with the engravings illustrating the same, will enable any one to erect a pit, who is desirous of forcing fruit or vegetables, the management of the plants, as taken from our memoranda, will be given. The pit should be built before cold weather, and every thing got in readiness for forcing. The bars of wood should be put in their places; on these the slate stones or brush, and the dry leaves. The sashes, or boards, should be put on, to keep the rain and snow out of the bed, and prevent injury to the brick work, from frost: in some convenient place, away from frost, should also be carried a sufficient quantity of loam and leaf mould, for the purpose of sowing the seeds and earthing up the plants as they proceed in growth; let it be laid in a heap, in a shed, and covered over with hay or straw; this done, all is in preparation to commence, at the convenience of the cultivator.

(*To be continued.*)

ART. II. *The Influence of Flowers.* By C. C.

"ARE not flowers the stars of earth, and are not stars the flowers of Heaven? Flowers are the teachers of gentle thoughts, the promoters of kindly emotions."

AMONG the many indications of the advance of our country in taste and refinement, none afford a surer criterion than the increased attention which is given to flowers and fruit. When we notice the many establishments in our vicinity, within a few years, devoted to the improvement of horticulture, we cannot but rejoice at the diffusion of an employment so well adapted to afford much pure and innocent pleasure; and we doubt not the time will soon arrive, when the cultivation of flowers will be pursued as a means of moral and intellectual advancement, as well as a source of exquisite gratification.

Every thing which tends to increase domestic enjoyment, which furnishes to a family that pleasure at home, which otherwise they would be impelled to seek elsewhere, is valuable. There is nothing which adds more to happiness, than for all the members of a family to be united in one common and pleasant pursuit—not that all should have the same daily occupation—but that there should be some sources of pleasure open to all, and to increase which, all should in their turn contribute. No employment, perhaps, can so effectually give this union of purpose, and this sympathy of feeling, as the cultivation of flowers. It opens a wide prospect of enjoyment, with scenes to suit many varying tastes. To the scientific mind, to one who loves to search out causes and effects, to discover the hidden properties and qualities of things, what an interesting and yet almost untrodden field does botany present! Then to one whose heart predominates over the intellect; who delights in sentiment; who prefers deep feeling to lofty thought, a garden yields many exquisite delights. His poetic mind gathers much of its finest imagery, its most beautiful thoughts, from the fragrance and loveliness of flowers, and it is quickened and enlightened by the thoughtful contemplation of their varied graces.

And for humbler purposes, for less exalted natures, the riches of Flora furnish many gratifications. For the morning drawing-room, or for the evening dress, there can be no prettier or more appropriate ornaments than can be found among her stores. And to the affectionate heart, what sweeter tribute can be offered to the invalid mother, or the declining sister, than the first fruits of the garden, and the first buds of the rose. Even the little child laughs, in the fulness of its happiness, when it is permitted to play with the flowers, and fill its lap with buttercups and clover blossoms.

And so it is in this one amusement; all ages and all tempers can find an appropriate gratification; all may be made more happy. It ministers, also, to man's moral nature. A green-house, connected, as we sometimes see them, with the most frequented apartments of a family, is, in winter, when the garden is bereft of its beauty, and the orchard has yielded its fruit, an almost unfailing source of interest. To enjoy, when storms are beating without, and the chill of winter speaks in the howling wind, the mild air, the fragrance, and the beauty of this reserved fragment of summer, tends to produce feelings of contentment and satisfaction—feelings which show themselves forth in acts of kindness and words of affection.

Another advantage, which the cultivation of flowers affords over other pleasures is, that it can hardly be wrested to evil. Absorbing as it is, it produces no feverish excitement. Bringing the mind into close contact with the loveliest things in nature, it shuts out the vexatious feelings arising from collision with the world. Its pleasures are all calm and tranquil. The contemplation of any of the works of God has a mighty effect in soothing and quieting the tumult of human passions, and this precious power over the heart is freely givèn, even to the lilies of the field. Where we see a love for these, that is nòt the place to look for the turbulence of passion, or the debasements of sensuality. When we see by the road-side a cottage, around whose door the sweet-briar and the honey-suckle are climbing, and before which, in its little garden, is displayed even the humbler flowers,—the marygold, the pansy, the aster, and the poppy—how instinctively do we form a favorable opinion of the inhabitants of that cottage; how certain we may be of finding peace, contentment, and affection, inmates there!

C. C.

October, 1835.

Art. III. *On the Cultivation of the Tulip.* By J. W. Russell, Superintendent of Mount Auburn, Cambridge.

The season for planting bulbs being at hand, and presuming that some remarks would not at this time be unappropriate, particularly in regard to the flowering of the tulip, I with pleasure send you the following, which will be, perhaps, of some interest to your readers, and extend the cultivation of this favorite flower.

To attempt to describe this lovely genus, would, I humbly conceive, be an insult to the common sense of any community. The beauty of the tulip flower draws the attention of the most careless observers, and as it were, makes itself known to them at once, because it is one of those kind of flowers, when taken notice of, is rarely or ever forgotten. The Dutch are famed through the civilized world, for their splendid collections; inasmuch as some of their private ones have been valued at some thousands of pounds sterling. In England I have had the care of tulip bulbs, that were valued from *five shillings* to *five pounds sterling*, a *single bulb*; this is, perhaps, one reason why we so seldom meet with a choice collection in this country; the first cost being so great, and the time it necessarily takes, to give them proper attention, is another considerable item with those who have business to attend to, and who have but a small portion of time to spare, in the care and production of elegant flowers. Nevertheless, there are persons in every city who can afford to spend both time and money in such pursuits; but by not understanding the nature of them, are prevented from making the attempt. In order to do away with this difficulty in part, I will engage to give them all the knowledge I have on this subject, which will cost but a trifling sum, compared to the years of time I have been collecting it together.

Those persons who are desirous of obtaining a good collection of tulips, should, by all means, make their selection from some of the established seedsmen or nurserymen; for, to trust to the bulbs that are sold every year, at the *auction* rooms, in nine cases out of twelve, they would be deceived; therefore it is highly recommendable, to make the selection from persons of established *credit*, even if the cost is four times as much, rather than to run any hazard. Supposing the bulbs are on hand, the first step is to prepare for planting: the compost should be a mellow light earth, or leaf soil, (the top spit of an old pasture field), preferring it rather light, than of a strong binding nature, and well rotted stable manure, blending the whole well together. To three wheelbarrow loads of the soil, add one of manure, and so continue on, until there is enough mixed for use. This will be found to be an excellent compost for the growth of the tulip, if it has been thoroughly made. The beds should be four feet in width, and from twenty to thirty feet, more or less, in length; preference should be given to a plat of ground that is well sheltered from the north-west and easterly winds, observing to keep away from the shade of large trees as much as possible. Having decided upon the location, go to work, and throw out the whole of the surface and under soil, to the depth of two and a half feet, taking it away to some convenient place, leaving the bottom of the bed nice and level; then look out for some good stable manure, about half rotted, for the purpose of laying at the bottom, about six inches thick; this will leave two feet in depth for the compost; this may appear, to some people, altogether superfluous; nevertheless, it ought to be done, for this reason; the manure will be in an excellent condition for mixing with the soil the succeeding year. I shall here observe, that it is not necessary to prepare a fresh compost every year, after such an one has been made as here recommended. If the operator thinks the soil ought to be renewed in some degree the second season, a portion could be taken away from the bed, and replaced with some fresh compost, and so on year after year, never neglecting to place the manure at the *bottom* of the bed, as before stated: to do this properly, begin at one end, and take out the whole of the soil, until you come to the bottom of the bed. If it was made four feet in width, take four feet in length; this will leave a trench four feet square, and two and a half feet deep; wheel the soil thrown out, to the other end of the bed, in order to finish off with. The manure should now be laid at the bottom at the depth proposed; mark off again four feet in length, and place the top spit immediately on the manure, continuing so to do, until you have a similar trench at the other end; this will completely change the compost every year, by bringing the under soil to the surface, which is of great importance—level off with the soil which was wheeled to the opposite end of the bed from where the trenching was begun.

But to return to the planting of the bulbs the first year. I shall suppose the bed or beds are already filled up with the compost a little above the level of the ground; allowing it to settle to the original level: this ought to be done the first week in November; the second week, have the surface of the bed raked perfectly smooth and even; then stretch a line tight and straight the whole length of the bed six inches from the front side, and with a small piece of stick mark off close to the line; remove the line again six inches, and mark off, and so go on, until you have six straight lines the length of the bed; this will leave six inches clear, both at the front and back; then mark off across the bed, six inches apart; this will leave the whole of the bed in six inch squares. At the angle of each square, or where the lines are crossed, place a handful of sand. If the day is fine, go to work and plant the bulbs immediately, for there is no trusting to the weather, at this season of the year. Place a bulb in the *centre* of each handful of sand that was put there for this purpose. When the bed is planted, cover them with a compost similar to that they are to grow in, three inches deep; observe to mulch the beds over with leaves or litter, about six or eight inches, before the approach of severe frosts; it is also indispensably necessary to have a light frame built over the bed, for the purpose of fixing upon it a light canvass, or strong cotton cloth, to shade the flowers from sudden storms of wind, rain, early frost, and particularly the hot sun. In the spring of the year, some tulip growers make use of hoops bent over the beds at regular distances, and throw over bass mats; but a permanent *frame* would be but a trifling expense, and is much to be preferred. As to the size of the frame, every one can suit their own taste in the dimensions of it; all that is necessary is, to secure the plants and flowers from the before mentioned casualties. Take off the covering of leaves, &c., in the spring, as soon as the plants begin to make their appearance, and with a trowel or small fork, stir up the soil a little between each row, and leave the whole smooth and neat; now begin to make a quantity of small neat stakes, about two and a half feet in length, for securing the flower stems to, beginning at one end of the bed, and placing a stake in the centre of the four first plants. Procure some lead wire, and twisting it once or twice round the stake, you will find that there is only three inches to go to reach the flower stems of four tulips; twist it once round the stem carefully, leaving room enough for it to play about easy; thus it will take three stakes to secure twelve of the flower stems, which, if neatly done, will have an elegant effect. After flowering, the tops will soon begin to decay; and when yellow, or dead, the bulbs ought to be taken up and laid away from the sun to dry a day or two; then clean and place them in a dry room, there to remain till the time of planting; look over them occasionally, to see that they are all in good order.

Tulips are known by the following names: *Early Tulips*, which flower about a fortnight before all others; *Bizarres*, which have a yellow ground, striped with brown, purple and violet, with intermediate shades; violet and rose *Bibloemens*, which have a white ground, striped with violet, purple, black, cherry, rose, and intermediate shades: these are considered the most valuable by the florist; *Baguets*, which are nearly allied to Bibloemens, but are much stronger in their growth, and more gross in their colors; *Double* and *Parrot* tulips are esteemed mostly as border flowers. Yours,

J. W. RUSSELL.

Mount Auburn, Cambridge, Oct. 12th, 1835.

ART. IV. *Beautiful Plants growing wild in the Vicinity of Boston.*

By E. B. KENRICK, Watertown.

(*Continued from page 377.*)

[N. B. All these plants are perennial, unless intimation is given to the contrary.]

CYPRIPEDIUM.

(According to alphabetical order, the present genus ought to have been inserted and described in the last number of this Magazine, but was inadvertantly omitted.)

This curious and admired genus is readily distinguished by four spreading petals; and especially by an inflated sac, lip, or nectary, and a somewhat slipper-shaped seed vessel.

Cyprip̀edium acaúle, or *Cyprip̀edium hùmile* Low Ladies' Slipper. The present species differs from the others, in its having no stem leaves. Scape or stem, leafless; from six to twelve inches high. Leaves two, springing from near the top of the root, oblong, obtuse, plaited, downy. Flowers commonly single, terminal, nodding.. The nectary, or largest, and most conspicuous part of the flower, is an inflated, somewhat pear-shaped sac, about an inch and a half long, and half as wide, of the most pure, delicate, and expressive purple, or rather a lovely blush color.—Woods; for instance, north of the Arsenal.—Blossoms in May and June.

Cyprip̀edium cand̀idum White Ladies' Slipper. Stem leafy. Leaves lance-oblong. Lobe of the style lanceolate, rather obtuse. Lip or nectary compressed, shorter than the lance-formed petals. Nectary or flower, white.—Pennsylvania.—May.

A white species is said to have been found growing wild in Brookline, Massachusetts. A yellow species, I am told, has also been discovered in the woods of the same town; but whether it is the *parvifl̀orum*, described by Dr. Torrey as having spotted flowers of a yellow color, or the *pub̀escens*, described by the same author as having spotted flowers of a greenish yellow, I have not been informed.

Cyprip̀edium spectábile Tall Ladies' Slipper. A stout plant, about two feet high, with stem and leaves hairy. Leaves oval lance-formed, plaited, exactly resembling those of *Ver̀atrum viride* (Indian Poke or White Hellebore). Flowers, two or three, large, the lip much inflated, variegated with stripes of purple and white.—In Augusta, Maine; Woodstock, Vermont.—Blossoms in July.

IRIS.

Iris gr̀acilis Boston Iris. Of the same family as the Flower-de-luce, and Blue Flag; the latter of which, in particular, it strongly resembles. Stem round, many flowered· Leaves grass-formed. Flowers beardless. Germs triangular, grooved round the sides. Outer petals slender, spreading, purple at the edge, yellow and veined in the middle, the yellow portion being much greater than in the Blue Flag. Inner petals lance-formed, slightly notched at the end.—South Boston and Cambridge; or in the same places with the next species, but much less frequent.—June.

Iris versicólor Blue Flag. Almost too common to require description, were it not for the sake of comparing it with the preceding species. Leaves sword-shaped; stem acute on one side. Capsules or seed vessels oblong, three-sided, with obtuse angles; outer petals spatulate, or paddle-formed, being obtuse and large at the outer end, and gradually tapering into a stalk at base; also beardless; the border purple; the claw or petal stem variegated with green, yellow and white, and veined with purple. Inner petals erect, varying in shape from spatulate to lance-formed, usually paler than the outer, and often notched at the ends.—Wet meadows, &c.—June.

LIATRIS.

Liàtris scariòsa. A very beautiful native, from two to four feet high. Stem unbranched, somewhat hairy. Lower leaves lance-formed, tapering to both ends ; upper ones grass-formed. The leaves are rough on the margin, and a little pubescent. Flowers about fourteen, appearing, in form and color, almost like small, purple, thornless thistles, and growing in a raceme (several inches in length), which might pass for a proper spike, were not the flower stems too long. Scales of the calyx paddle-shaped (Dr. Torrey says ovate), and having membranous, purplish margins. The seed, like that of other plants of the same genus, has an egret or crown of purple hairs, each of which, when examined by a microscope, appears to be a feather.—Woods, and sandy hills.—Watertown, in the woods north of the Arsenal.—August.

LILIUM.

Lìlium canadènse Drooping Lily. A frequent embellishment of our meadows. Stem from two to four feet high, sometimes simple, sometimes branched. Leaves lanceolate, arranged in whorls or circular rings. Flowers commonly from one to about three, yellow trumpet-bell shaped, terminal, and pendulous. Petals turned outwards, and internally spotted. I once found a plant of this kind, five or six feet high, suspending thirteen lilies from its branches and branchlets, and looking almost like an inverted chandelier.—Meadows, &c.—June, July.

Lìlium philadèlphicum Red Lily. About one foot (Dr. Torrey says two feet) high. The Red Lily, says Dr. Bigelow, is a less showy, but equally beautiful species with the Drooping Lily. Leaves whorled, a few sometimes standing desivately. Flowers bell-shaped, one, two, or three in number, upright, of a dark vermillion, spotted. Petals supported on long claws or stems, giving the flower an appearance peculiarly open and unique.—About the margins of fields, or among bushes, &c.; in a dryer soil than the Drooping Lily.—June, July.

Lìlium supèrbum Superb Lily. One of the most magnificent of our native plants. It grows from four to six feet high. Leaves linear-lance formed, three nerved, and arranged in horizontal rings ; but the upper leaves do not stand in regular order. Flowers bright orange, spotted, having the petals rolled outwards, and growing in a large, drooping, pyramidal raceme, containing from three to twenty lilies.—

Low grounds.—Rare in these parts, but said to be common in New Hampshire.—July.

Dr. Bigelow says, that, "by cultivation in a rich soil, the *L. canadénse* approaches in character to this species."

LOBELIA.

Lobèlia cardinàlis Cardinal Flower. The splendid red flowers of this plant are much admired by foreigners. Stem erect, about two feet high, without branches. Leaves alternate (not opposite), ovate-lance formed, with unequal teeth, or whitish glands, on the margin; also, having a long, sharp point, turned to one side. Corolla bright scarlet, with a long tube surmounted with five spreading segments, the three lower ones being the widest. Flowers on a more or less one-sided raceme, from five to ten inches long, and appearing at a distance like a spike.—Rather scarce hereabouts, but is found occasionally in meadows, or more commonly by the margins of brooks and rivers; for instance, near Watertown bridge.—Blossoms in July and August.

When its first flowers of the spike appear, if this plant be broken off at the ground, and kept in water within doors, it will continue to blossom for a month, the leaves retaining their color and freshness.

LUPINUS.

Lupìnus perénnis Wild Lupin. Stem somewhat hairy, and rising gradually (with a curve at the ground) to the height of about one foot. Leaves digitate, consisting of about eight or ten lanceolate wedge-formed leaves, arranged like rays around the end of the leaf stem. Flowers blue, pea-blossom shaped, in a raceme, or a terminating spike.—Sandy woods and hills; found at Newton; also abundantly, in the woods, at Watertown.—May, June.

LYSIMACHIA.

Plants of this genus have the corolla wheel-shaped; that is, the corolla is monopetalous, or in a single piece, with a spreading border, and a very short tube.

Lysimàchia ciliàta Heart-leaved Loosestrife. Erect, from one to three feet high, branching, and a little hairy. Leaves standing opposite to each other (often three inches long, and one inch wide), pointed, somewhat heart-shaped at base, the leaf stems being long, and fringed with parallel hairs. Flowers yellow, wheel-shaped (half an inch in diameter), the divisions of the corolla being roundish, toothed, and tipped with a bristle. Flowers drooping; chiefly in pairs, of which the upper ones, having flowers in their shoulders, are so near together as to seem almost in fours.—Low grounds; Newton, Watertown.—June, July.

LYTHRUM.

Lythrum verticillàtum Swamp Willow Herb, or Grass Poley.

A fine fresh looking aquatic, two feet high, or more, and surrounded at base by a soft, thick, fibrous substance, appearing like rotten wood. Leaves either opposite, or in threes, lance-formed (not indented on the margin), with stems. Flowers of a fine purple, approaching to pink, with five or six wavy, spreading petals, crowning a ten or twelve toothed calyx, supported by subdivided flower stems, growing out of the shoulders of the leaves, and almost surrounding the main stem.—Found in or near the water on the margin of Fresh Pond.—July, August.

MIMULUS.

Mimulus ringens Monkey Flower. "A handsome plant," two feet high. Stem erect, smooth, angular. Leaves opposite, stemless or closely sessile, ovate-lance formed, serrate or saw-toothed, and having a long, sharp point. Calyx tubular, with five acute angles, and as many pointed teeth. Corolla purplish light blue, twice as long as the calyx, and having the petals yellow, the upper lip turned back at the sides, and the lower lip much larger, and irregularly three-lobed. The peduncles or flower stems are four sided, curved upwards, and grow out of the axils of the leaves. The flower has been fancied to be shaped like a monkey.—Ditches and wet soils.—July, August.

MONARDA.

Monárda allaphylla Soft Monarda. A plant with flowers like those of lemon balm, but having the taste and smell of thyme. Stem square, commonly purple, or spotted, and about two feet high. Leaves oblong-lance formed, rounded at base, notched on the margin, except towards the ends; also soft, downy, and appearing dotted under a microscope. Branches and leaf stems downy. Calyx and bractes, or false flower leaves, fringed with parallel hairs. Flowers in terminal heads, blue, or flesh-colored. Corolla with two lips, and an open throat, the upper lip being grass-formed, and the lower lip having two lobes, and a grass-formed, middle segment.—Rocky situations.—Woods, near Mount Auburn. —July, August.

NYMPHÆA.

Nymphæa odoràta Pond Lily, or sweet-scented Water Lily. This queen of our aquatic flowers is so well known, that I shall only quote from Dr. Bigelow, a few remarks on its habit.

"It is found in deep waters, where its roots are secured from the frost in winter by a sort of natural hot bed being thus provided for it. The roots creep through the muddy bottoms of ponds, to a great extent. They are very rough, knotted, blackish, and as large as a man's arm. The stalks, both of roots and flowers, spring directly from the root.

They vary in length, from one foot to five or six, according to the depth of the water."—Common in muddy-bottomed rivers, ponds, and ditches.—Very abundant, large, and fine, at Church's Pond, at a small distance from Mount Auburn. —July.

ŒNOTHERA.

Œnothèra biénnis Tree Primrose, improperly called Scale-ish. Of this plant (though a sort of pet of mine), I shall say nothing; being aware that its charms, like those of many other objects, are too familiar to elicit any great warmth of general admiration.

Œnothèra púmila Dwarf Tree Primrose. Stem smooth, rising from the ground obliquely, to the height of about one foot. Leaves stemless, lance-formed, blunt pointed, and quite entire or free from indentures on the edges. Calyx with a very long tube, and its four sepals or leaves bent down archwise. Flowers yellow, four petaled, stemless, and growing in a leafy spike. Petals heart-shaped. Seed vessel eight angled, somewhat oval, with the upper part larger than the lower.—Pastures.—June.

ORCHIS.

Plants of this genus have a corolla five petaled, the upper petal being arched or vaulted; also, an additional, dilated petal (called the lip of the flower), with a spur or nectary growing from its base. Those who have seen one of the species, have a general idea of them all. The leaves and stems have a considerable likeness to those of Veràtrum viride, Indian Poke.

Orchis blepharigĺottis Fringed white Orchis. This very delicate species is distinguished by its snowy white flowers. Its height is about two feet. Leaves oblong, sheathing. Lip lance-formed, fringed or finely divided at the edge, and as long as the upper petal. The horn or spur is much longer than the germen or seed vessel. Flowers pure white, on a spike rather short for the species.—Rare.—Swamps, and meadows.—Cambridge, Newton.—July.

Orchis fimbriàta Fimbriated purple Orchis. A very beautiful plant. Stem two feet high, with several broad-lanceolate, smooth leaves, and ending in a large spike of bright purple flowers. The germ is bent inward, and swelled in the middle. Petals five, spreading, the two inner ones fringed (or finely cut). The lip of the nectary is rather longer than the petals, and is divided into three wedge-formed segments or parts, spreading like a three-parted fan, the segments being flat, fringed, nearly equal, and not converging towards each other. The upper petal is whole and even on the edge; and the spur, which appears like a club-formed thread, is considerably longer than the germ.—Newton.—July.

Orchis grandiflòra Large Flowering Orchis. This elegant plant grows to the height of two feet, or more. Stem thick, angular, fistulous. Lower leaves blunt pointed, oblong oval, or long oval, with parallel sides; upper leaves, and the bractes or false flower leaves, lance-formed, and sharp-pointed. Spike oblong-oval, many flowered. Petals all contiguous, pale purple, the three outer ones ovate, concave, even, and whole at the edge; the two inner ones ovate, with claws, and cut or fringed on the whole of their sides, but scarcely so at the ends. Lip pendent, deeper purple, more than twice the length of the petals (the lip being sometimes nearly an inch long), divided into three segments, the two lateral ones wedge-formed, cut and fringed to the middle or farther, the middle one twice as long, fan-shaped, cut and fringed to the middle, without being notched at the end, the fringes on each side of the middle converging in front of the lip. The upper petal has a notch between the two anthers.—Grows in wet meadows.—Lancaster, Leominster, Deerfield, &c.—Abundant in Enfield, New Hampshire.—June.

"This plant is perhaps the largest and most beautiful of all the species of Orchis. The spike sometimes consists of a few large flowers, but in favorable situations it is five or six inches long, and three inches in thickness. The flowers are more than twice the size of *O. fimbriàta*, paler, and very different in the form of the lip, which has a very large middle segment, with a part of its fringe always bent inwards." —*Dr. Bigelow.*

Orchis orbiculàta Round-leaved Orchis. A remarkable species, from twelve to eighteen inches high, with two very large round leaves, spreading flat upon the ground, their form sometimes varying to ovate. The scape or stem bears a spike of loose, greenish white flowers, with long, grass-formed tips.--Wet meadows, &c.; Danvers; Hallowell, Maine; Conway, Romney, &c., New Hampshire.—June, July.

Orchis spectàbilis Showy Orchis. A low species, with large fine flowers. Root fascicled, or in a bundle. The leaves are at the bottom of the stem, and are large, oval. Stem six inches high, very sharp angled. Bractes or false flower leaves (not calyx leaves) lance-formed, longer than the flower. Flowers few, purple and white, and among the largest of the genus. Lip of the nectary whitish, undivided, as long as the spur, retuse or slightly hollowed at the end; also, scolloped at the sides, with or without intermediate teeth. Petals straight, converging, ovate-lance formed, the lateral ones longer. Spur white, large, club formed, shorter than the germ.—Shady rocks.—Woods, Vermont, and New Hampshire.—May, June.

Yours, E. B. Kenrick.

Watertown, Sept. 9th, 1835.

(*To be continued.*)

Art. V. *On the Cultivation of Hyacinths in Glasses and Pots.*

The following observations, though not written expressly for this Magazine, we have thought might be of considerable interest to many of our readers who cultivate hyacinths and other bulbs. The season is now approaching for planting them, and many may be induced to grow a few, who have heretofore been prevented, from the want of information on the subject. Hyacinths in glasses, it cannot be supposed will flower as well as when in pots; but they have a very beautiful appearance, and flower sufficiently strong to render them highly desirable.

For this purpose, the earliest kinds should be selected; and we would state, that we prefer single to double ones, or at least, an equal number of each, for the following reasons: the spikes are much taller, the bells far more numerous, the colors more vivid, and the fragrance very powerful; indeed, in some of the best kinds, the bells are so profuse as to form a complete pyramid of flowers. If attention is given to the following simple observations, no fear need be entertained of disappointment.

Select good large solid bulbs, especially for glasses; we have often seen it stated in the communications of experienced growers, that "small bulbs are worse than useless;" it is labor lost, to cultivate those which are sold at *auction*; they are the mere *refuse* of the Dutch florists, such as would be thrown away as worthless; the roots are weak, and would fail to flower well if put in their natural element, the earth; much more so if in an artificial one of water. How frequent we have heard complaints that bulbs start well, make a rapid growth of an inch or two, and then stop; the flower stems dying ere a flower opens. This is from the cause that there is not sap enough stored in the bulb the preceding year; and it must consequently make a premature and sickly growth the following one. Unless attention is paid to the selection of first rate bulbs, disappointment must certainly ensue. All complaints arise from this cause; and if *cheap* bulbs are cultivated, *cheap* looking flowers must also repay amateurs for their care.

Management in Glasses.—The bulbs may be put in the glasses any time from October to January; when a succession of flowers is wanted, they may be put in every fortnight. Place in the bulbs, and then fill up with water just so that the bottoms of each will be immersed an eighth of an inch; then put the glasses in a dark *cool* room until the roots have protruded a half an inch, or so, which is generally in about ten days. They should then be exposed to the sun, light and air, as much as possible. If they receive the sun on one side only, turn them round every two or three days to prevent their growing crooked. Change the water once a week; if the glasses get very dirty, draw out the roots carefully, and give them a thorough washing. The water should not be allowed to freeze. Any *pure* water will do; but rain water is the best.

After bulbs are grown in water, they are not worth saving; as it will take three or four years to recover their strength.

Management in Pots.—To bloom hyacinths to perfection, the pots should be seven inches in diameter and ten inches deep; plant only *one* in each pot; it is almost unnecessary to say, that it is folly to expect to procure fine flowers from a bulb in a pot scarcely large enough to hold a crocus. Put in some broken potshreds in each pot; fill them up with the soil before recommended, and place in the bulb, just covering it; give the pot a gentle knock to settle the soil. Select a dry spot in the garden, and dig a hole eighteen inches deep; place in the pots, and cover them up with the earth six or more inches in depth; upon the approach of frost, cover them with dry leaves, sea-weed or hay. They should all be planted at one period, during the month of November.

Two or more pots can be taken up at any time throughout the winter, thus giving a succession of flowers from January until April. If there is no garden to place the pots in, they should be put in a box in a *cool* cellar, and covered with earth in the same manner. This is the method we have practised, and have never failed in blooming them well. We have had the main stems of some single ones eighteen inches high, with upwards of *fifty bells*, forming a pyramid of flowers more than *twelve inches* in height. It cannot be supposed that a bulb, set in a pot and immediately forced into growth, will flower strong; they must acquire roots first to support the foliage.

When they are in flower, give them plenty of water, by placing pans under the pots, and keeping them constantly filled. We have seen manure water recommended, but we have never, ourselves, tried the experiment; cease to give water when out of flower, and discontinue it altogether when the leaves assume a decaying appearance.

Roots that have flowered in pots are but little injured, and will bloom tolerably strong the next season, if set out in the ground; the same bulb should never be set in a pot two successive years, but by shifting them alternately, from the pot to the garden, they may be made to flower vigorously.

The management of the hyacinth in beds, to flower them to perfection, will be given in some future number.

As many of our readers may not know what constitutes the properties of a fine hyacinth, we extract the following from Maddock's Florist's Directory:

"The stem should be strong, tall, and erect, supporting numerous large bells, each suspended by a short and strong peduncle or footstalk, in a horizontal position, so that the whole may have a compact, pyramidal form, with the crown or uppermost flower perfectly erect. The flowers should be large and perfectly double; that is, well filled with broad, bold petals, appearing to the eye rather convex than flat or hollow: they should occupy about one half the length of the stem. The colors should be clear and bright, whether plain, red, white or blue, or variously intermixed and diversified in the eye: the latter, it must be confessed, gives additional lustre and elegance to this beautiful flower. Strong, bright colors are, in general, preferred to such as are pale."

The following is a list of superior kinds, and may serve to assist some in making their selections:

Double White.
General Washington
Prince of Waterloo
Triumph Blandina
La Deese
Miss Kitty, *rosy eye*
A la Mode, *rosy eye*

Single White.
Grand Blanch Imperial
Grand Vainquier
La Candeur
Duc de Cumberland

Double Yellow.
Bouquet d'Orange
Duc de Berri d'Or
Ophir
Louis d'Or

Single Yellow.
Princess Charlotte
Crœsus

Double Red.
Bouquet tendre
Groot Voorst
Marquis de la Coste
Comte de la Coste

Single Red.
Cochineal, *crimson*
La Balaine, *rosy*
Lord Wellington, *rosy*
L'Eclair
Mars, *crimson*

Double Blue.
Grand Vedette, *pale*
Martinet
Habit Brilliant
Comte de St. Priest, *pale*

Single Blue.
La Crepuscule
Grand Vedette
L'Ami de Cœur

ART. VI. *Notices of new and beautiful Plants figured in the London Floricultural and Botanical Magazines; with some Account of those which it would be desirable to introduce into our Gardens.*

Edwards's Botanical Register, or Ornamental Flower Garden and Shrubbery. Each number containing eight figures of Plants and Shrubs. In monthly numbers, 4*s.* colored, 3*s.* plain. Edited by John Lindley, Ph. D., F. R. S., L. S., and G. S., Professor of Botany in the University of London.

Curtis's Botanical Magazine, or Flower Garden Displayed, containing eight plates. In monthly numbers, 3*s.* 6*d.* colored, 3*s.* plain. Edited by William Jackson Hooker, L. L. D., F. R. A., and L. S., Regius Professor of Botany in the University of Glasgow.

DICOTYLEDONOUS, POLYPETALOUS PLANTS.

III. *Ranunculàceæ.*

PÆONIA

moután *var,* lácera, Double-red curled tree Pæony. A hardy perennial plant; growing about two feet high; flowers rosy red; propagated like the other varieties; a seedling; originated in England. Bot. Reg., t. 1771.

A great addition to this magnificent genus. "Raised from the seed of Pæónia moután, by Mr. William Hyland, gardener to the Earl of Sandwich, at Hinchingbrook, near Huntingdon," and "flowered for the first time in April, 1834, when the plant was only three years old." Mr. Hyland states, that the seed did not germinate until eighteen months after they were sown; and that this is the case with all the moután species. The petals are much cut and gashed, and distinctly bordered with a narrow edge of carmine: it is altogether a superb variety. (*Bot. Reg.*, July.)

XXXII. *Ternströmidceæ.*

CAMELLIA.

Camellia japónica *var.* Juliànii, one of the kinds mentioned at page 343, is figured in the Floricultural Cabinet for July; if it is as regular in its form as represented in the plate, it is a splendid acquisition. C. japónica *var.* Cunninghámii, is figured in Paxton's Magazine of Botany for the same month; raised from the warratah, impregnated with the double striped: some of the flowers are almost white, and others entirely a rich crimson.

LVI. *Myrtàceæ.*

LEPTOSPERMUM

scopàrium *var.* grandiflòrum, Rigid-leaved Leptospermum. A green-house plant, growing six to eight feet high; flowering in spring and summer; flowers of a delicate rose color; propagated by cuttings or seeds; a native of Port Jackson. Bot. Mag., t. 3419.

Similar to L. scapàrium, but with larger flowers, and of a delicate rose color; "a desirable plant for a conservatory," flowering copiously throughout spring and summer. The plants should be fully exposed to the light. It is a native of the swamps in the neighborhood of Botany Bay. The seeds were introduced in 1817, to the Kew gardens. (*Bot. Mag.*, July.)

LX. *Proteàceæ.*

ISOPOGON

Loudònii *Brown*, Mr. Loudon's Isopogon. A green-house shrub, growing four or five feet high; flowers rich purple, appearing in spring; a native of New Holland. Bot. Mag., t. 3421.

"A rare and handsome plant, and probably the most showy of the whole genus." This species was raised from seeds at Kew, and at Mr. Knight's, of the King's road, in 1830, but has flowered only at the former place. The plant is erect in its growth, with alternate lanceolate, coriaceous leaves. The flowers are in terminal heads, much spreading, and of a rich purple color. Named in compliment to Mr. Loudon, the able conductor of the Gardener's Magazine, and editor of various works on horticulture, agriculture, &c. Discovered by Mr. Baxter, near King George's Sound, in 1829. (*Bot. Mag.*, July.)

HAKEA *Sw.*

ferruginea *Sw.* Rusty-stalked Hakea. A green-house shrub, growing six feet high; flowers white; a native of New Holland. Bot. Mag., t. 3424.

A very handsome species, raised from seeds in the botanic garden, Edinburgh. The flowers appear in axillary fascicles, sessile, on several inches of the main branches; Dr. Graham states that it comes nearest to the repánda. "It flowers freely in a green-house." (*Bot. Mag.*, Aug.)

LXXXII. *Leguminòseæ.*

CLIANTHUS *Solander*. (From *Kleios*, glory, and *anthos*, a flower, in reference to the noble aspect of the species of this beautiful genus.)

puniceus *Solander*, Crimson Glory-pea. A green-house evergreen shrub; growing three or four feet high; flowering all summer; color, a rich crimson; cultivated by seeds and layers; a native of New Zealand. (*Bot. Reg.*, t. 1775.)

A most magnificent "half-herbaceous evergreen shrub," in the climate of Britain; and said to be, from its extraordinary beauty, "one of the most valuable species [plants] that has been introduced of late years." In manner of growth, it is said to be something like Sutherlándia frutéscens. Being a native of New Zealand, it is supposed that it will stand the winters of England unprotected. It is now priced in the nurserymen's catalogues at *fifty shillings sterling*, and as Dr. Lindley says, it will "form one of the most important and welcome of all modern additions to our flower gardens," we extract the following account of it, presuming this will be read with interest, and so beautiful as it is, introduced into our collections.

"Its leaves are smooth, pinnated, and of rather a succulent texture, consisting of about eight pairs and an odd one. The stem is entirely free from furrows or angles, and is about as thick as a goose's quill. The flowers grow in oval clusters, hanging down from the axils of the leaves upon the lateral branches; each flower is rather more than three inches from the tip of the standard to the tip of the keel; the petals are of a light bright rich crimson, without any mottling or marking; the standard, which is of an ovate lanceolate figure, and much tapered to the point, is reflexed so as almost to lie back upon the calyx; the wings are very much shorter than the keel, the point of which is so prolonged as to look like the beak of some bird, although it must be confessed not much like that of a parrot. The flowers are succeeded by brownish black pods, two inches and a half long, seated on a slender stipe, and convex on the upper instead of the lower edge; so that unless attention be paid to their manner of growth, it would seem as if the seeds grew to the lower instead of the upper edge. They are covered all over inside with a delicate cottony down, in which lie the small kidney-shaped seeds of a dull yellowish ochre color, mottled with small dark brown blotches and speckles."

The specimen was figured from the garden of Mr. Gowen, who has found that it succeeds best treated as a hardy plant in a peat border. The Rev. J. Colman succeeded in flowering it in a large pot in the green-house, and also ripened its seeds. The seeds were sent by the Missionaries from New Zealand. (*Bot. Reg.*, July.)

ACACIA

tristis *Graham* Mournful Acacia. A green-house shrub; flowers yellow; a native of New Holland. (*Bot. Mag.*, *t.* 3420.)

This species was raised from seeds received from New Holland in 1828, and flowered for the first time the past spring. It is somewhat similar to A. armàta; but its nearest affinity is A. undulàta. In the arrangement of the species, it is between these two. Dr. Graham thinks that many of what are now put down as species, will, when more is known in regard to this genus, be considered as mere varieties. The habit of growth is much more lengthened than in A. armàta. (*Bot. Mag.*, July.)

XCI. *Empètreæ.*

EMPETRUM

rubrum *Willd.* Red Crowberry. A hardy evergreen shrub, with small red flowers, growing in peat; a native of South America. (*Bot. Reg.*, 1783.)

A very interesting evergreen shrub, but of not much beauty; its habit of growth is rather procumbent, and much branched; the leaves small, linear; flowers solitary and axillary; three of the petals are of a dull red, and the other an ochre color. Introduced by Mr. Low, of Clapton. (*Bot. Reg.*, Aug.) The order Empètreæ was first instituted by Mr. Nuttall; and its true character determined by Mr. Don. It contains but few genera, and a limited number of species; natives of North America, the south of Europe and the Straits of Magellan. (*Bot. Reg.*, Aug.)

CXVI. *Rhámneæ.*

COLLETIA

hórrida *Broigniart*, Bristly Colletia. C. fèrox *Gill and Hook* in *Bot. Misc.*, *t.* 1. 154., *t.* 44. F. B. A hardy evergreen shrub; flowers greenish white and purple; appearing in May and June; propagated by seeds. A native of Chili. (*Bot. Reg.*, *t.* 1776.)

A species "by no means as handsome as the C. spinòsa of the same country;" it has much the habit of a furzebush, and so thickly set with spines as to have the appearance of branches. The plant loses its leaves when old. "It grows in common garden soil, and prefers a hot dry situation, such as the foot of a south wall, without any kind of shade." "Probably common in Chili and Mendoza." (*Bot. Reg.*, July.)

CLVI. *Polygòneæ.*

ERIOGONUM *Michx.*

compòsitum Compound Eriogonum. A hardy herbaceous plant, growing three feet high; flowers yellowish white; appearing in May and June; propagated by cuttings. A native of North-west America. (*Bot. Reg.*, t. 1774.)

A beautiful and highly desirable hardy herbaceous plant, "forming a patch of neat dark green leaves, which throw up in abundance, in May and June, their woolly scapes, terminated by masses of yellowish white flowers." It was discovered by Mr. Douglas on the rocky gravelly banks of rivers in New Albion. Flourishes either in peat earth or common garden soil. It would be a valuable acquisition to our hardy perennials. (*Bot. Reg.*, July.)

DICOTYLEDONOUS, POLYPETALOUS PLANTS.

CLXX. *Ericàceæ.*

RHODODENDRON

arbòreum *var.* álta-clerénse *Lindl.* Highclere tree Rhododendron. A hardy (?) shrub, growing six or eight feet high; color of the flowers bright crimson; propagated by layers and inarching; an English hybrid. (*Bot. Mag.*, *t.* 3423.)

This most splendid variety was raised in the gardens of Lord Caernarvon, from a seedling of R. Catawbiénse, which had been impregnated with R. pónticum, and the former again with R. arbòreum. It is as hardy as R. pónticum, and "equally splendid in regard to the size and color of the flowers with R. arbòreum." The flowers are of a clear bright crimson, with spots of a deeper color. The clusters have all the freeness of R. Catawbiénse. The foliage is of a rich bright green, contrasting finely with the brilliancy of its lovely blossoms. Dr. Lindley has said that in it "every thing of beauty a plant can possess seems collected, fragrance alone being wanted." It is six weeks earlier than the common kinds. (*Bot. Mag.*, Aug.)

We have a plant in our collection which has several buds, and a fine display of its blossoms may be anticipated in the ensuing spring.

caucásicum *var.* straminea *Hook.* Straw-colored Caucasian Rhododendron. A hardy (?) shrub, growing six or more feet high; flowers yellowish white; propagated like the other kinds. (*Bot. Mag.*, *t.* 3422.)

The present variety is cultivated in the Glasgow Botanic garden and other collections in Scotland, as the R. caucásicum; Dr. Hooker has, however, from its variation from the figures of this species in the Flora Rossica and Botanical Magazine deemed it a variety unknown in its origin; in the former work the flowers are small and of a delicate pink, in the latter as large as those of R. arbòreum, pure white within, spotted with green and tinged with a deep shade of blush on the outside. It is hardy in Scotland. It forms a fine shrub, the branches of which are terminated with a large umbel of straw-colored flowers. The leaves are of a deep green on the upper surface, and underneath of a rusty color.

There are plants in our collections imported as the R. caucásicum, which have not yet flowered; but the foliage looks similar to this figure. (*Bot. Mag.*, July.)

ERICA
recurvàta
Eurylòma recurvàta *D. Don* (new arrangement) in *Syst. of Gard. and Bot.* A green-house shrub, growing two feet high; flowering in May; color white and dark brown. *Bot. Mag.*, t. 3427.

A beautiful species; "the foliage is of a delicate green color, and the leaves, at the extremity of the branches, form a sort of starry crown around the dense heads of flowers, which are white below, and form a striking contrast to the deep brown, almost black, connivent segments of the corolla, and the bright red, much protruded styles." Dr. Hooker states that it does not agree with Mr. Don's generic character for Eurylòma. (*Bot. Mag.*, t. 3427.)

CLXXII. *Vaccineæ.*

VACCINIUM
albiflòrum *Hook.* White-flowered Whortleberry. A small shrub, with white flowers. A native of North America. *Bot. Mag.*, t. 3428.

A pretty species of our whortleberry, which has been introduced to the Glasgow Botanic garden. Nearly allied to V. corymbòsum of *L.*, of which it was first supposed a variety. It is not handsomer than many of our most common species. (*Bot. Mag.*, Aug.)

cæspitòsum *Michx.* Dwarf-tufted Whortleberry. A dwarf creeping shrub; flowers white, tinged with blush. A native of Hudson's Bay. *Bot. Mag.*, t. 3429.

An interesting species, first discovered by Michaux, about Hudson's Bay, but subsequently on the north-west coast of America, by Mr. Menzies, west of the Rocky mountains by Mr. Douglas, and on the east side, by Mr. Drummond, who introduced it to the Glasgow Botanic garden. Its geographical distribution is consequently very great. It produces numerous "delicate and graceful blossoms" in May. (*Bot. Mag.*, Aug.)

CLXXXVI. *Compositeæ.*

LASTHENIA *Decandolle, MSS.*
glabràta *Lindl.* Smooth Lasthenia. An annual plant, with yellow flowers; propagated by seeds. A native of California. *Bot. Reg.*, t. 1730.

A good addition to our hardy annuals. The plate represents a terminal shoot, with three yellow flowers, somewhat in appearance like Màdia élegans. The leaves are opposite, sub-amplexicaulis, acuminate, from the axils of which shoot out the flower stems. Introduced by the London Horticultural Society, in 1834. The seed should be sown in autumn. (*Bot. Reg.*, Aug.)

CXCV. *Asclepiàdeæ.*

HOYA (named in honor of Thomas Hoy, gardener to his grace the Duke of Northumberland).
Pòttsii *Traill* Mr. Pott's Hoya. A stove plant; flowers greenish white; a native of China. *Bot. Mag.*, t. 3425.

H. Póttsii is an elegant species, and should be found in our gardens. The leaves are larger than the H. carnòsa, and are three-nerved; penduncle two inches long. A single leaf of this species was brought from the vicinity of Macao, by Mr. Potts, and presented to Mr. Sabine, who planted it, and it soon flourished finely. (*Bot. Mag.*, Aug.)

CCXI. *Scrophularineæ.*

RUSSELIA (named after Dr. Alexander Russel, an English physician).
júncea *Zuccarini* Rushy Russelia. A green-house plant, growing about three feet high; flowers scarlet; appearing in July and August; propagated easily by cuttings. *Bot. Reg.*, t. 1773.

Russélia júncea is a beautiful green-house plant. It grows almost destitute of foliage, like a slender rush, and the branches, from their rather drooping habit, have an exceedingly neat and graceful appearance. On the end of nearly every twig, is a raceme of tubulous flowers, of a rich scarlet color, which contrast singularly with the nakedness of the plant. Found in Mexico, by Count Karwinski, and lately introduced into Britain from Berlin and Munich. (*Bot. Reg.*, July.)

CCXXVI. *Hydrophylleæ.*

EUTOCA
divaricàta *Lindl.* Straggling Eutoca. An annual plant; flowers violet; appearing in June; propagated by seeds; a native of California. *Bot. Reg.*, t. 1784.

An annual "pretty in bouquets, but hardly of more than botanical interest." The seed should be sown in August. Introduced from California. (*Bot. Reg.*, Aug.)

CCXXXIV. *Bromelidceæ.*

DYCKIA *Schultes* (named in compliment to his Highness the Prince of Salm,—Reifferscheid Dyck, a great lover of gardening, &c.)
rariflòra *Schultes* Scattered-flowered Dyckia. A stove plant, two feet high; flowers orange; appearing in June; propagated by offsets. A native of Brazil. *Bot. Reg.*, t. 1782.

A fine stove plant, agreeing, "in many of its habits," with the aloe. In the dry stove, "it produces its rich orange flowers in great perfection, and retains them in all their freshness and beauty, for several weeks." Its leaf is very curiously constructed; and Dr. Lindley remarks, that "few persons, when they look at the leaves of a plant, ever think of the curious internal mechanism of which all its vital actions are put and maintained in motion; and yet there is not, in the whole range of the creation, a more singular object than a leaf, nor one whose structure is a more admirable instance of design and forethought." Introduced from Berlin, by the Horticultural Society, in 1833. (*Bot. Reg.*, Aug.)

MONOCOTYLEDONOUS PLANTS.

CCXLVII. *Asphodéliæ.*

STYPANDRA
propinqua *All. Cunningham* MSS. Slender azure-flowered Stypandra. A green-house perennial plant; flowers azure blue; increased by cuttings. A native of New South Wales. Bot. Mag., t. 3417.

"A handsome plant." It was raised from seed in the Kew gardens, in 1822; "but under whatever culture, has not shown itself a plant of free growth." It grows in large tufts among sandstone rocks, in New South Wales. (*Bot. Mag.*, July.)

REVIEWS.

Art. I. *The Gardener's Magazine and Register of Rural and Domestic Improvements.* Conducted by J. C. Loudon, F. L.S., H. S., &c. In Monthly Numbers. 8vo., 1*s.* 6*d.* each. No. LXIV, for July.

In our last, we stated that the July number contained a communication on the coiling system of grapes, by Mr. R. Fish, which should be extensively read. The following extracts we have made, and we commend them to all who have any faith in the system. We have never, ourselves, had any confidence in it, and it is with pleasure that we are able to furnish our readers with remarks that so fully coincide with our views.

After stating the necessity of giving every new system a fair trial before condemning it, Mr. Fish observes:—" I shall, with your permission, sometimes give you an account of my failures, in order that you and your readers may inform me whether my want of success is to be attributed to my ignorance of the principles of management, or to the circumstances in which I am placed; or to the delusive vanity of individuals, who, in order to bring themselves into prominent notice, have, without sufficient proof, published, as most beneficial systems, those which, from their very nature, cannot be attended with utility or success: and I do this, hoping that if others should be induced to follow my example, the usefulness of the Magazine will be increased, and the interests of gardening, as an art and science, will be promoted.

" Having made these preliminary observations, I shall now proceed to offer some remarks upon a new system of cultivating the vine, the invention of Mr. Mearns; namely, that of coiling rootless shoots round the inside of a pot, in order to produce fruit from them the same season. Allowing that, after much trouble, a few bunches may be obtained by such a process, especially when tried late in the spring, my present impression is, that it never will be attended with that utility which will warrant its general adoption, even if it were practicable; and that, however interesting it may be, as establishing a phytological doctrine, the discovery can lay no pretensions to the honor enthusiastically claimed for it, of being a general benefit. I must confess that, reasoning upon first principles, my hopes of its success never were high; but as this season I had some shoots of old and young wood, from three to six feet long, I was anxious to give the system a trial; and accordingly, putting up a bed of dung and old leaves, I plunged the pots partially into it in the beginning of December, increasing the temperature by plunging deeper, &c., until from 60°, at the end of the third week, the bottom heat ranged from 85° to 95°: the atmospheric temperature of the pit ranging from 45° to 60°. I was well aware that the success would wholly depend upon getting the wood in the pot stimulated into action previously to the developement of the buds, so that when that took place, there might be roots formed to support them; and had succeeded so far, that, by the time the buds were expanding, the plants, which I examined, exhibited a dense mass of spongioles protruding from the wood, in contact with the sides of the pot. In the second week in January, I removed those on which the embryo fruit could be detected into another house, where they were more exposed to the light, the temperature of which ranged from 65° to 75°. Here, although they looked well for a short time, the bunches gradually shriveled up; so that, to cut the story short, I experienced a complete failure."

Mr. Fish proceeds with some general remarks on the "capabilities of plants to accommodate themselves, to a certain extent, to peculiar circumstances;" "But," he says, "why question the utility of the system before you have found it will not succeed, either when tried early or late? This question, frequently put, I answer by asking in what the utility consists, were I even to allow that the system did partially succeed, when tried, for instance, in the beginning or middle of March? For the final reception of your plants, you must have a frame or pit, &c.; and I should like to know if the most strenuous advocate of coiling is prepared to show that a pit, &c., appropriated to such a purpose, will insure more profit to the owner than if it had been appropriated to its wonted purposes; or if, by filling it at random with coiled pots, he could expect to realize any thing like the same weight of grapes which he would expect and obtain from vines planted out, and the tops taken into the pit, frame, &c., in the usual manner?"

The injury done to old vines, by cutting away the coilers, Mr. Fish thinks very great; the fine long ripened shoots being much the best for producing fruit; and if wood is not wanted, they should not be suffered to grow. Except where the long-rod system is followed, they cannot be cut away to any advantage.

"Feeling somewhat interested in the subject, I have written to several individuals, and all who have answered my letters inform me of their failures. All my acquaintances in this neighborhood have also failed. Surely, we do not understand Mr. Mearns's system, or he has not fully explained it to us; or he has himself been deceived as to its relative merit. For the purpose of farther elucidating the subject, I beg leave to propose the following questions, to which he ought to give a clear and decisive answer:—How many pots had he, when first he published his invention? and what weight of grapes did he have from these pots? and, upon an average, how many pots were destitute of fruit, for one which had fruit? Understanding that Mr. Mearns had many hundred pots this season, I also desire the same answers respecting them. These plain facts will give more knowledge of the system, so far as success is concerned, than a dozen of laudatory or condemnatory essays. To remove every doubt, it will be necessary also to know if Mr. Mearns is prepared to show that the specimens of his success, to which he refers, were all the produce of rootless shoots; and that none of them, such as the black Constantia vine, were plants that had been taken up with roots, and then coiled; or the produce of rootless shoots that are in the second season of their growth. If in the second season, I desire to know in what respect the coiling system is superior to that of Mr. Pillans, who obtains fruit in the second season from plants raised from buds; which system, although it appears to me to be impracticable, where time and labor are scarce commodities, is at any rate free from that objection which I have already designated as the principal argument against the utility of the coiling system. The propriety of the above questions must be apparent to every one who, like myself, knows not whether to admit that Mr. Mearns obtains a greater quantity of fruit by such a process than he would do by the ordinary method; or that he merely gets as much from a vast number of pots, as is sufficient to prevent the result from being viewed as a complete failure, which it unquestionably would in the case of those who only had a limited number of pots; and therefore the sooner the matter is set at rest the better, as I know that the system has not only been a source of trouble to gardeners, but also, in some cases, of unpleasantness between them and their employers."

It has always been our opinion that plants raised from eyes, and fruited the second season (page 37), would much better repay the gardener for his attention than the coiled system; we doubt if the latter will ever be practised at all, unless for the mere purpose of experiment. The questions of Mr. Fish are such as Mr. Mearns can answer, and thus throw more information upon the subject.

Just after the above communication went to press, the conductor received one from Mr. Mearns, accompanied with some of the coiled vines: in the former, he states that he has "coilers of last season in pots and boxes, with from three bunches to thirty-six on each vine, and of the large and fine kinds. I have coilers of this season with from three to twelve bunches on each, and fine wood for next season's bearing. One white Frontignan has nineteen fine bunches upon it, and was a rootless branches six weeks ago. I have at this time sixty pots of grapes in action, with three hundred and fifty bunches upon them; many nearly ripe, and finer, of the sorts, than I ever saw upon vines in a border. I have about thirty pots to bring into action, from last spring's coilers; and, as these are all my best shoots, I believe that they will produce me between five hundred and six hundred bunches of very fine grapes."

"This," the conductor observes, "is quite a different question from that of the practicability of getting fruit from a coiled vine the first season, which was the chief point insisted upon in Mr. Mearns's former communication."—(p. 60.)

MISCELLANEOUS INTELLIGENCE.

Art. I. *General Notices.*

American Magnolias in China.—In reply to a query, p. 325, I am able to say that Mr. Beale has, in his garden at Macao, a tree of Magnòl*ia* grandiflòra, which, when I saw it last, in 1830, must have been twenty feet high. From the tree Mr. Beale has struck off several branches by the Chinese mode of abscission, and distributed the young plants to some of the Chinese merchants at Canton, and to some of the inhabitants of Macao. He has done the same, also, with a smaller tree, which, from the very ferrugineous appearance of the under side of the leaf, I think was Magnòl*ia* g. ellíptica. Besides these, he had received from America, Magnòl*ia* glaúca, and a fourth variety, which, if I remember right, was M. auriculàta. The two latter plants had then been but lately received; but, as they were in good health, I have no doubt they have also been propagated and distributed, and now are as well as the two former, established in China.—*J. Reeves: Loudon's Gard. Mag. for Aug.*

The Discovery of the Tea Shrub in India.—Botanic Garden, Calcutta, Feb. 16, 1835. I do myself the pleasure to send you, enclosed, a copy of a paper on the extraordinary discovery which has been made, or rather confirmed, of late, of the true and identical China tea shrub growing wild in Upper Assam, within the Company's territories, through an extent of hundreds of miles towards the Chinese frontier station of Yunnan, where the shrub is cultivated for commercial purposes. A more splendid discovery has never been made, in matters relating to the commercial or agricultural resources of India. A committee of tea culture was appointed early last year, consisting of some of the highest civil officers in Calcutta, some merchants, and two of the most enlightened Hindoos, namely Baboo Redu Radhacant Dib, and Baboo Ramcomul Sen. I am a member also; and since Mr. Gordon was deputed to China to send round tea seeds and plants, as well as Chinese cultivators and manufacturers, I have acted for him as secretary to the committee. Our instructions were, to inquire into the practicability of tea being cultivated in Hindostan on an extensive scale, for the sake of its leaf. This recent discovery of the tea of Upper Assam has placed the views and prospects of the committee on a footing of almost mathematical certainty. Who would have dreamt of the shrub growing wild so far east as 76°? Its geographical limits had hitherto, I think, been traced only as far as somewhere between 105° and 110° E. lon. in the northern part of Cochin-China. We have already established tea nurseries in the mountains of Kamoon, Sirmare, and Gurwhal, between the upper parts of the Jumna and the Ganges. A large consignment of bohea tea seeds has already been received from China; but we have now to look to Assam only for our supplies of seeds; for, like the seeds of all other varieties of perennials, bohea seeds will, in all probability, produce nothing but the common sort. A botanical deputation is going to be sent up to Assam, as soon as it is practicable, in order to institute, on the spot, all the inquiries that are necessary to render our information respecting the nature of the tea there as complete as possible. I am to head the mission, although a more fit person might easily have been found. All my arguments have availed me nothing, and the committee have determined that go Wallich must. However, I am to be aided by one or two accomplished botanists of my own recommendation, and they will more than supply my own divers and manifold deficiencies. Dr. Wight and Mr. Griffith, two of the most splendid naturalists that ever came to this or any other country, I hope, will accompany me; I have also named Mr. Nash, a most excellent man, recently come out. I wish my friend Royle was out here; he would be the man, and he would most undoubtedly have been sent on this duty. Dr. Falconer has charge of the Gurwhal and Sermare nurseries, besides the Saharunpoor garden. In matters of pure botany and horticulture, I anticipate such a harvest as was never seen before. Think only to herborise under the shade of wild tea trees, in forests never in this world examined before!

I have sent to Mr. G. Loddiges the details of a very beautiful consignment of growing plants, which he and his worthy brother sent me lately in a *hermetically sealed* box (I may almost call it so). I wish you would make mention of this most extraordinary and novel mode in your Magazine. I have asked Mr. Loddiges to send you my letter, or an extract from it.—*N. Wallich.—Ib.*

The old double Yellow Rose, I find blooms well in the hills of Caermarthanshire, dressed with bog earth, against a south-east wall; but it is subject to occasional blight.—*Gard. Mag.*

Acàcia dealbàta, planted in the open garden in May, 1834, and then about six inches high, measured, at the end of the season, upwards of eleven feet high, with abundance of long lateral shoots, and a stem of considerable thickness. It was protected, about half way up its stem, with spruce branches on the approach of winter; and the severe frost of the the 8th of January, in the present year, killed the plant down to the protected part.—*Ib.*

Art. II. *Foreign Notices.*

ENGLAND.

Agave americàna.—At Bute House, the Villa of the Right Honorable Viscountess Dillare, at Old Brompton, there is one of these splendid and rarely flowering exotics in full bloom. The flower stem is rising of towards fifteen feet high, surmounted by a fine branched head of flowers. Her Ladyship has been at the expense of erecting a canvass covered frame to shade, and thereby preserve its beauty as long as possible. It is the striped variety.—*Hort. Reg.*

Exhibitions of the London Horticultural Society took place on June 6th and July 4th; the display of flowers is said to have been most brilliant. Gold and silver medals were awarded for grapes, strawberries, currants, roses, balsams, coxcombs, heartsease, &c. &c.—*Gard. Mag.*

Metropolitan Society of Florists and Amateurs.—What is called the second grand central exhibition of flowers of the Metropolitan Society of Florists and Amateurs' stock, took place on Monday and Tuesday, the 15th and 16th of June, in the nursery grounds of Mr. Jenkins, in the Regent's Park. The gardens, though well attended, were by no means so crowded as on former occasions of fetes of this and similar descriptions; the days of exhibition being fixed at exactly the same time as those of the Surrey Zoölogical Gardens. There was a splendid show of flowers, and some of the specimens were more than usually fine. Wieppert's band, the band of the Blues, and a brass band, were engaged to perform on the occasion; and tents and awnings were placed in various parts of the garden, but fortunately the weather was so favorable that the tents and coverings were of no use but to afford shade from the burning rays of the sun. Amongst the company present, there were the Duchess of Sutherland, Count Munster, the Marchioness of Westminster, the Marchioness of Tavistock, Countess of Jersey, Lord Amherst, Ladies Talbot, Canterbury, Clive, Mayo, &c. &c. There were also several of the foreign Ambassadors, of whom the Turkish Minister was most conspicuous. The public were admitted by tickets, for which half a crown was charged, whilst those at the Surrey Gardens might be had for *one shilling;* these tickets were advertised to be sold at the principal nurseries and seedshops, and at other places, and those who bought them got into the grounds for *half-a-crown* each, but those who, through ignorance, had neglected to provide themselves with tickets, were charged *five shillings* at the gate. The majority paid this demand without hesitation, but a large proportion of persons, apparently of the first respectability, objected to so great an augmentation of charge, and declined to become spectators of what was going on in the garden. Next day the same thing was exhibited for *one shilling.*

The premium for the best one hundred distinct varieties of heartsease was awarded to Mr. Lane, florist.—*Flor. Cabinet.*

Great Floricultural exhibition at the Surrey Zoölogical Gardens.—A sort of feud having arisen between Mr. Cross, the proprietor of the Surrey Zoölogical Gardens, and the Metropolitan Society of Florists and Amateurs, the exhibition of flowers by this Society, which had heretofore been held in these grounds, has been removed elsewhere. Mr. Cross and his friends, however, were determined not to sit down patiently under this treatment; and accordingly, on the 15th and 16th June, in pursuance of numerous advertisements, a grand floral fete was held at the Gardens, which exceeded even the most sanguine expectations of its promoters. The display of stove and green-house plants, geraniums, roses, &c., was splendid in the extreme. A collection of shrubby calceolarias, by Messrs. Young, were very splendid. Mr. Knight, nurseryman, King's-road, Chelsea, exhibited a beautiful collection of New Holland plants, cape heaths, &c. Mr. Blair, gardener, Stamford-hill, and J. Brampton, Esq., also contributed; and Mr. Low, Clapton Nursery, had a fine stand; Mr. Wood, had some fine specimens of Alstræmèria tricólor, and one of A. puchélla. Messrs. Young had also a fine A. tricólor, and a magnificent geranium newly imported from France. Mr. Lane produced a fine collection of balsams. An immense variety of cut flowers, from Mr. M'Intosh, gardener to the King of the Belgians, at Claremont, were employed in decorating the tent in which all cut flowers were exhibited: around the pillars were trained some fine specimens of Combrètum purpùreum, Quisquàlis índica, and Bignònia capreolàta. The charms of music were also enlisted on the occasion—the band of the Coldstream Guards being in attendance. The refreshments were of the most light and delicate kind. Numerous marquees were erected, and every arrangement which ingenuity could devise, or art effect, was made to enhance the enjoyment of the visiters. It was not the least animating feature of the day, that the attendance of ladies and gentlemen was numerous and fashionable, and that every one appeared to partake the *espiret* spontaneously arising from the nature of the entertainment,—a great many persons expressing a wish for an early repetition of so interesting and agreeable an exhibition. The *tout ensemble* of the Gardens was beautiful in the extreme. On the first day, near 8000, and on the second day 6000 persons were present. Amongst the company there were Lords A. and F. Fitzclarence, Lady Munster and family, Lord Stuart de Rothsay, the Marquis of Hastings, the Marquis of Worcester, Lord Southampton, the Turkish and French Ambassadors, &c. &c. After the business of the day was over, the gentlemen who exhibited at the Gardens dined together at the Horns, Kensington; Mr. Tyler took the chair, and was supported by many gentlemen well known in the floricultural world, but unconnected with any other Society of a similar description.

The Judges on the occasion were—Mr. M'Intosh, Gardener to His Majesty the King of the Belgians; Mr. Low, nurseryman, Clapton; and Mr. Watts, nurseryman, Peckham. These gentlemen standing so high in the profession, and in the esteem of every person acquainted with them, not the slightest cavil existed relative to their decisions.—*Ib.*

Various prizes were awarded for roses, heartsease, geraniums, &c. &c.

A grand Floricultural Fete and Exhibition of Flowers and Flowering Plants for the Victoria cup, and other prizes, was held at Lord's Cricket Ground, St. John's Wood Road, Regent's Park, May 26. It was numerously attended, and the display of flowers and plants was very brilliant, notwithstanding the state of the weather, which was unfavorable. It is pleasing to see exhibitions of this sort taking place in every quarter of the metropolis and its suburbs. We hope the exhibitions at Lord's Cricket Ground will be continued regularly; and this, with the exhibitions at the Surrey Zoölogical Gardens, would supply, if the expression may be used, the demands of the north and the south sides of the metropolis; the Chiswick exhibitions supply the west end; and there remains only one to be established at Greenwich or Deptford, to gratify the eastern quarter of the metropolitan district. We could wish to see four large botanical and horticultural gardens similarly situated, with a view of promoting the same objects.—*Gard. Mag.*

Acàcia lophántha.—There is a plant of this species growing luxuriantly, without the slightest protection, to the height of forty feet, at Abbotsbury Castle, on the Dorset coast, which ripens its seeds in the open air; and there is another plant of the same species, twenty feet high, also growing without any protection, in the grounds of E. Pendarvis, Esq., M. P., Cornwall.—*L. W. D.—Ib.*

Laúrus nóbilis.—The largest sweet bay I ever saw is at Margam, the seat of J. P. Talbot, Esq., M. P., about twelve miles from Swansea. It is sixty-one feet six inches high, and forms a magnificent and compact bush.—*L. W. D.*—*Ib.*

Rhododéndron pónticum.—At Maeslaugh Castle, Radnorshire, the seat of W. Wilkins, Esq., there is a most remarkable specimen of this plant. It is twenty-one feet high, and its branches cover a space of one hundred and five feet in circumference ! It is grown without bog earth, and flowers freely every year.—*James Alexander, Gardener to W. Wilkins, Esq. Dec.*, 1834.—*Ib.*

In the Hammersmith Nursery there are some remarkably fine specimens of trailing plants budded standard high, the singularity and beauty of which deserve the attention of every amateur. Wherever there is a lawn or a small spot of turf as a foreground, without much interest, all that is necessary is to plant one of these trees in it.—*Ib.*

Covent Garden Market.—During one week in June, the immense quantities of the following articles were sold:—of peas, more than 2500 sacks of three bushels, and 12,000 sieves of one bushel each ; of gooseberries 2000 sieves [or bushels] ; of strawberries 150,000 pottles [of two quarts each].—*Conds.*

New Mode of Labelling Plants.—A very superior label for plants may be made by turning to account that hitherto time-wasting accomplishment called "transferring." The mode proposed is, to lay on the upper portion of a suitable slip of glass, a coat of transfer varnish, on which the name, &c., of a plant, printed on paper and moistened, is to be pressed with the finger (the printed side downwards). When the varnish is dry, the paper is to be rubbed off gently with a damp cloth, leaving the printing attached to the glass, on which a strong coat of white oil paint is to be laid, and sprinkled with fine sand or powdered glass; or another slip of glass similar to the first, painted on one side with white lead, may be cemented on it, when a label of surpassing distinctness and permanency will be produced. Any ordinary printed catalogue of plants may be made available for the purpose above stated.—(*Irish Farmer & Gard. Mag.*) This mode will, probably, never be much adopted, unless in private collections of plants, where neatness and beauty is the sole object. For nurserymen, it will not be of much use.—*Conds.*

Art. II. *Domestic Notices.*

Introduction of the Filbert.—Cobbett, in his "American Gardener," claims for himself the merit of having introduced the Filbert into this country, in the year 1800. This proves to be *one* of Cobbett's errors. It is probable the first Filbert is the one still growing in the old Bartram botanic garden, near Philadelphia. It was introduced, we believe, by the elder Bartram—has fruited scores of years ago, and as Col. Carr (the present proprietor) assured us on the spot, had made firm roots in the American soil, "before William Cobbett was born."—*A. J. D.*

Fine specimen of the Calàdium esculéntum.—A plant of the Calàdium esculéntum, has been grown the present season in the neighborhood of of Newburgh, N. Y., of the following unusual dimensions. The largest leaves measured over the greatest extent of length four feet—width nearly three feet. The curiously formed spathe, was also twelve inches in length. As we believe it blossoms but seldom, it may not be uninteresting to add that the color of the flower, or rather the spathe, was neither white, as is stated in Loudon's Encyclopedia of Plants, nor green and purple, as given by Sweet, in his Hortus Britannicus—but deep orange, and the *spadix* light yellow.—*Ib.*

Coloring properties of the Venetian Sumach or Purple Fringe Tree.—We have been informed by William Partridge, Esq. of New York, whose "Treatise on Dyeing" is a standard work, that the wood of the Venetian Sumach (Rhús Cotinus), well known as an ornamental shrub or small tree in our gardens, affords a beautiful and permanent *orange* dye. It is the opinion of this gentleman, that the cultivation of this shrub to any extent would be an object of great profit to the grower, and importance to the manufacturer. It is easily increased by layers, and we believe, pefectly hardy in every part of the Union.—*Ib.*

The splendid collection of Green and Hot-house plants, well known in Philadelphia as the property of J. B. Smith, Esq., has been lately disposed of by him entire, and is now removed by the purchaser, J. W. Knevels, Esq., to his residence at Newburgh, on the Hudson, near New York. A handsome conservatory has been erected for their reception, by the latter gentleman, of one hundred feet in length, and another of thirty; and we understand that no pains or expense will be spared to preserve the reputation of the collection as one of the rarest and unique in the country.—*Ib.*

A New Variety of Pea.—The Charleston Courier states that a quantity of a new species (?) of pea has been imported from Cuba, by Dr. B. B. Strobel, of that city, and placed in the publication office of the Southern Agriculturist, for gratuitous distribution, with a view of introducing their culture into the United States. It is a native of old Spain, and is called the *Garvanza* or *Braganza*. Peas of this kind yield in old Spain 300 bushels to the acre; they sell ripe in Havana market for from $1 to $1 50 per bushel. They are excellent for soups, are larger than even the marrowfats, and are said to be better, cooked in the same way.—*Middletown Sentinel.*

Great crop of Cushing Pears.—The original tree of this valuable variety produced, this season, on the farm of its owner (Col. Washington Cushing, Hingham), *eighteen* bushels of pears. In our report of the market for the month of September, they were selling at *seventy-five* cents per half peck. If they were all disposed of at this price, they produced the great sum of $104. This, certainly is a desirable kind for the marketer.—*Conds.*

Massachusetts Agricultural Society.—The annual exhibition was holden at Brighton on the 14th of October. An address was delivered before the Society by Gen. H. A. S. Dearborn, which we have understood was unusually interesting. The show of stock was exceedingly fine. Some fine Ayrshire cows, lately imported from England, were sent for exhibition, by the owner, J. P. Cushing, Esq., Belmont Place.—*Ib.*

Exhibition of the Horticultural Society of the Counties of Ontario and Wayne (N. Y.), at Canandagua.—This society held its exhibition, Wednesday, Sept. 30th. The show of fruits, flowers and vegetables was very fine. Premiums were awarded for various excellent specimens. Mr. Hopkins, one of the members, addressed the society in regard to various experiments which he had made in relation to the mildew on the grape. "The statement was wholly oral, and it is impossible to give a full and exact report of it here; though the general conclusions which Mr. H. drew from his experiments, was, that the *mildew of grapes* was analogous to the *rust of wheat;* that is, an exudation, or oozing out of the young grape through its tender skin, burst, in the very early stages of its growth, by excessive stimulation by *too high manuring;* and then acted on by the *intense heat of our American summer sun.* Mr. H. had examined the grapes in all stages of their progress, with a microscope, and was entirely convinced that he was right, as to the *nature* of mildew, and believed that he had ascertained at least *one* of its *causes*, if not its only one. He exhibited samples of clusters, taken from different parts of his vines, to illustrate his positions and exemplify the effects of his different modes of management. He considers that the treatment, indicated by his experiments, was to avoid high manuring, and to prune little or none, so as to leave to the clusters the shelter of all the shade the vine can furnish, and even to train the vines on trees for the sake of additional umbrage, as the custom has always been in Italy. On this point, Mr. H. referred to the natural habits of the grape, and to the methods of culture pursued in the more sunny regions of southern Europe, and thought that our modes of treatment, should be drawn from those climates, as being more like our own, rather than from countries many degrees north of us, as England and Scotland, where the humid, chill, and unsunned atmosphere about the vines, rendered much stimulation and pruning necessary."—*Gen. Farm.*

Rare Plants in bloom at Belmont Place.—Crínum platypétalon, Passiflòra racemòsa prínceps, Nerìne corúscans and lùtea; N. corúscans is a brilliant species, and should be better known. Passiflòra racemòsa princeps is a very desirable plant, somewhat similar to P. racemòsa cærùlea, but a more profuse flowerer. In the stove, several varieties of Hibíscus have been in bloom all summer, and continue to throw out numerous buds. Hibíscus insígnis, at p. 384 in the last number, should be Ipomæa insígnis, inadvertantly written. Levick's Incomparable dahlia has here produced a large majority of the flowers, true to the kind.—*Conds.*

[The following extracts are from a letter to the Conductors, from a correspondent in Craftsbury, Vt., dated Sept. 30, 1835.]

"I have never known so backward a season; many of those plants which have perfected seed heretofore, are but just in blossom; such as Gília capitàta, Xeránthemum lùcidum, Chrysánthemum coronàrium, Lavátera triméstris, Centaurèa cyànus, Agératum mexicànum, Crèpis barbàta, Zínnia multiflòra, &c. &c. We have already had several severe frosts, which have killed the more tender plants, such as Miràbalis dichòtoma, Impàtiens balsámina, Convólvulus, Commelína, Dahlia, &c., and now, whilst I am writing, the ground is almost white with snow, a circumstance most unusual at this season." * * * * *

"I have, this season, added several of our native plants to those I had before; and many of them seem to bear the change well. They are as follows:—Cypripèdium pubéscens, spectábile and acaúle; Habenària grandiflòra (I think), Tríllium erythrocárpum and eréctum, Pyròla rotundifòlia and another species or variety; Erythrònium americànum, Convallària (four or five species), Lílium supérbum, Viòla (four or five species), Asclèpias incarnàta *var.* glàbra, Sarracèna purpùrea, Mímulus ríngens, Scutellària lateriflòra and gaririculàta, Oxalis (three species), Hypéricum (three species), Kálmia glaúca, Spiræa salicifòlia and some others of which I have not ascertained the names. I have used Eaton's nomenclature. Several of them are fine flowers, and if they are not yet introduced into the gardens of the metropolis, and vicinity, they should be, and I should be very happy to assist in bringing about that result." * * * * * "The Sarracèna flourishes well in my garden, and is beautiful as well as curious. The Kálmia glaúca is a most splendid shrub; I do not know a more beautiful flower. If there are any of them, or anything I can procure you, which you would like, I will most cheerfully send them. * * * *

"*Oct. 1st.*—The snow which I mentioned last night as covering the ground, has fallen three inches or more, and being very damp, has broken down fruit trees and plants. My flowers are, this morning, nearly all bent down to the ground and covered with snow. This will probably prevent my saving the seed of several plants, especially of those you sent me. Such a storm, so early, is not recollected by the oldest inhabitants." —*Yours, J. A. P.*

Singular deviation in the growth of the Grape.—We have received from a correspondent in Portsmouth, the following account of the same, accompanied with specimens of the fruit:

"I have sent you, as a curiosity, some purple grapes, which grew on a white sweetwater vine. I am certain of the fact, as I took the grapes from the vine myself. There is an Isabella standing near; but these grapes were twelve feet from any Isabella. You will perceive that part of them have the form of the Isabella, and some of them of the sweetwater. The color of one grape is mixed. The vines have stood where they now do for several years, but nothing of the kind has ever taken place before. The mixing of fruit in the grape is new to me. It is nothing unusual with the squashes, and it has taken place with the apples—an instance of the russet growing on a limb of the Baldwin. But in this case, the limbs of the two trees interfered."

We tasted of the grapes, and some of them had a strong flavor of the Isabella. Have any of our correspondents ever known of such a singular anomaly? If so, we should be glad to hear of it.—*Conds.*

Large Cauliflowers.—We lately noticed some fine specimens in Quincy Market. One weighed upwards of *twelve* pounds.—*Ib.*

A splendid show of Dahlias lately took place at the store of Mr. G. C. Thorburn, New York. We have been informed that there was upwards of a thousand blooms; the flowers were sold, and brought *sixty dollars.*—*Conds.*

Exhibition of Dahlias.—A number of beautiful dahlias were lately exhibited in New York. There were about three hundred blooms, embracing one hundred and thirty kinds, one hundred and twenty-four of which were *seedlings.* The following account of the same is from the New York American:—

"We recommend to all lovers of flowers, to visit the unequalled collection of dahlias, from the garden of Buel & Wilson, of Albany, now at A. Smith's, florist and seedsman, No. 388 Broadway.

"There are, we suppose, some one hundred and fifty different sorts, varying in shade of color, from pure white, through pale and bright orange, red and scarlet, up to the most gorgeous purple. They are arranged with great taste, in a box filled with wet moss, in which the flower stems are imbedded, and present a most beautiful *coup d'œil* indeed."

Pennsylvania Horticultural Society.—The sale, on Saturday last, of the flowers, fruits and vegetables left from the exhibition, amounted to $107. The whole receipts in three days exceeded $1500. The number of visiters, including members who did not pay, and visiters on gratuitous tickets, could not have been less than 7000. From a Philadelphia paper, dated Oct. 17th, we copy the following:

Imperial Tokay Grapes.—"Each vintage," says an article about the Imperial Tokay, "produces three kinds of wine; the first, that which flows spontaneously from the grapes themselves, which may be called the essence of Tokay; this is considered the best kind of the three, and what makes it so, is its *flowing spontaneously* from the grapes." Something like this is observable in regard to that most delicious of all fruits—the peach. In going through a peach-orchard, with fruit-knife in hand, and plucking, paring and eating at pleasure, that peach is the sweetest, the most luscious, particularly if it is a clingstone, when the skin has bursted, and the juice is candied over the cleft or fissure in the peach.—*Ib.*

Gama Grass.—I send you specimens of Gama grass. I have it in all soils. With us it is worthless, as much so as fiorin, which made *two hours noise* in the world and then expired. *Yours, J. Lowell.—Roxbury, Aug. 22d,* 1835.

Art. IV. *Quincy Market.*

		From	To
Roots, Tubers, &c.		$ cts.	$ cts.
Potatoes:			
Common,	per barrel,	1 00	
	per bushel,	30	37½
Chenangoes,	per barrel,	1 25	1 50
	per bushel,	33	50
Sweet potatoes, per bushel,		75	1 00
Turnips,	per barrel,	75	1 00
	per bushel,	33	50
Onions,	per bushel,	62	75
	per peck,	20	25
	per bunch,	3	4
Beets, per bushel,		50	75
Carrots, per bushel,		50	75
Parsnips, per bunch, (6 each,)		none.	
Salsify, per bunch,		12½	
Horseradish, per pound,		12½	
Shallots, per pound,		20	
Garlic, per pound,		14	
Cabbages, Salads, &c.			
Cabbages: per dozen.			
Savoys,		25	50
Drumhead,		25	50
Brocoli, each		12½	25
Cauliflower, each,		25	50
Celery, per root,		6	12
Lettuce, per head		6	8
Beans: shelled.			
Sieva, per quart,		12½	17
Common white, per quart,		none.	
Tomatoes, per dozen,		12½	
Peppers (for pickling), per lb.,		2	3
Spinach, per peck,		none.	
Egg Plants, each,		none.	
Squashes and Pumpkins.			
Canada crookneck, per cwt.,		1 00	2 00
Common crookneck, per cwt.		1 00	2 00
Pumpkins, each,		20	25

		From	To
Pot and Sweet Herbs.		$ cts.	$ cts.
Parsley, per half peck		25	
Sage, per pound,		37	50
Marjoram, per bunch,		25	37
Savory,		25	37
Fruits.			
Apples, dessert:			
Common,	per barrel,	1 00	1 50
	per bushel,	50	62½
Baldwin,	per barrel,	1 50	1 75
	per bushel,	50	75
Porter,	per bushel,	3 00	
	per half peck,	50	75
Russets,	per barrel,	1 50	1 75
	per bushel,	50	75
Pears:			
St. Michael per dozen,		75	1 00
Urbaniste, per dozen,		1 00	1 50
Messire Jean	per bushel	3 00	
	per half peck,	50	75
Winter, per barrel,		3 00	4 00
Quinces, per bushel,		3 00	4 00
Peaches, best, per dozen,		none.	
Pine Apples,		none.	
Grapes:			
Black Hamburgh, per pound,		50	75
White sweet water, per lb.,		25	
Catawba, per pound,		25	
Isabellas, per pound,		12½	
Barberries, per bushel,		75	87½
Cranberries, per barrel,		6 25	6 50
——	per bushel,	2 00	2 25
Oranges,	per box,	4 00	6 00
	per dozen,	25	50
Lemons,	per box	4 00	5 00
	per hundred,	1 50	2 00
Chestnuts, per bushel,		2 50	3 00
Walnuts, per bushel,		1 50	1 75
Almonds, per pound,		12	14
Filberts, per pound,		4	6

Remarks. The fine weather of the present month has ripened off crops uncommonly well—far better than was anticipated in September. Potatoes are plenty, and prices are much reduced; large quantities have already arrived from the eastward;—they are of excellent quality. Sweet potatoes are plenty and very good; but not so large as usual. Turnips and onions are abundant; as, also, are beets and carrots. Parsnips have not yet come to hand. Salsify is tolerably plenty; but it has not yet become sufficiently known to be properly estimated; we deem it, ourselves, one of the most delicious vegetables; where oysters cannot be had, it is an excellent substitute. Horseradish is yet scarce. Cabbages are plenty and very fine. Of brocoli and cauliflowers, there have been some fine specimens, especially of the latter; its cultivation is much better understood than formerly. Celery is plenty and excellent. Lettuce, the past week or two, has been brought in of good size. Squashes are very abundant and prices low. Apples are unusually plentiful, and of fair appearance; Porters are about gone. Of pears the market has been supplied with finer sorts than any previous year. We have observed, among others, the Cushing, Urbaniste, Winter Beurré (so called), Moorfowl Egg, Fulton, Marie Louise (of some) and Napoleon. Grapes are abundant; fine Catawbas sell at good prices. Lemons and oranges are scarce and high. Chestnuts and walnuts of this year's crop are tolerably plenty.

October 23d. M. T.

Art. IV. *Massachusetts Horticultural Society.*

Saturday, Sept. 19th.—The meeting to-day was held for the choice of officers for the ensuing year; the following gentlemen were elected officers of the Society: Elijah Vose, President, Enoch Bartlett, Jonathan Winship, Samuel A. Shurtleff and Pickering Dodge vice presidents; Wm. Worthington, Treasurer; Robert Treat Paine, Corresponding Secretary; Ezra Weston Jr., Recording Secretary; Counsellors and various Committees were also chosen.

Received.—A package of seeds from H. A. Breed of Lynn; the seeds having been received by him from the Baron Heureich von Ludwig, of Cape Town, Cape of Good Hope.

Sept 26th.—Exhibited. Dahlias from M. P. Wilder. Dahlias from S. Sweetser. From Messrs. Hovey, dahlias. From S. Walker, dahlias and other Flowers. A variety of flowers from J. E. Teschemacher. From S. Downer, Capiaumont, Beurré Knox, and Williams's Bon Chrétien (Bartlett) pears. From Wm. Oliver, St. Ghislain, Capiaumont, Rousselette de Rheims and Gansell's Bergamot pears. From John Heard, Watertown, Long green or Bergamot, Autumn Catherine and two other kinds, names unknown. From Stephen Williams, Northboro', Harvard and other kinds, the names unknown; also, Summer Pearmain apples. From Barney Hedge, Plymouth, Williams's Bon Chrétien pears. From G. W. Bond, Milton Hill, St. Michael pears. From S. Philbrick, Washington pears (a fine fruit). From T. Lyman, Jr., Harvard pears (?) From J. Barnard, Dorchester, a fine pear, name unknown. From D. Newhall, Lynn, a pear raised from the seed of the St. Michael, sowed in 1823; it was of the Bergamot shape—tolerably good. From R. Manning, Royal George (*Cox*), a clingstone, and the Orange or apricot-peach (Duhamel); a pear, a seedling from A. D. Williams, Roxbury, about the size of the Seckel; also, the Epine d'Eté pear, and Quetsche or true German prune. From E. Vose, apples, the name unknown.

October 3d.—Exhibited. A large variety of dahlias, from S. Sweetser. Dahlias from M. P. Wilder. From Messrs. Hovey, dahlias and bouquets of flowers. Dahlias from S. Walker. Flowers of several varieties of Mimulus from Jos. Breck, Lancaster.

From John Lowell, two kinds of pears, unripe, (one the Capel); seedlings of Mr. Knight, and the trees sent by him to Mr. Lowell. From Wm. Oliver, Seckel, Rousselette de Rheims, and St. Ghislain pears; half blood and Noblesse (?) peaches. From S. Pond, Seckel, Golden Beurré and Capiaumont pears; Semiana plums. From Thomas Lee, Heath peaches. From John A. Kenrick, Urbaniste pears. From M. H. Ruggles, Fall River, Wilbur pears, (a native of that place); medium size; russetty yellowish color; flesh melting. From C. Cowing, a native pear, originated in Dedham. From James Leonard, Taunton, a pear, name unknown. From Dr. Shurtleff, Platt's Bergamot pears, and a kind the name unknown; Whittemore apple, a native. From B. V. French, several varieties of apples and pears. From George Domett, Boston, St. Michael pears, and Chasselas grapes. From Jos. Balch, Roxbury, Epine d'Eté, or Summer Thorn, and two other kinds.

From R. Manning, Washington, Buffum, Cushing, Bowdoin, Pope's Scarlet Major, Raymond, Saunders Beurré, Ronville, Verte Longue, Williams's, Epine d'Eté, and Autumn Superb (fine) pears; Quetsche or German prunes; Rambour Franc and red Calville apples. From S. Downer, Heathcot, Urbaniste, and Beurré Knox pears. From A. D. Williams, Dudley and Ram's Horn apples, and a kind the name unknown. From S. G. Perkins, Beurré d'Or (golden Beurré), Beurré d'Yelle (Beurré Diel), Chaumontelle, Sylvange, Doyenne Gris and Duchess d'Angouleme pears; the latter weighing nineteen ounces, the largest ever exhibited at the Society's room. From Jacob Deane, Mansfield, nine specimens of apples, accompanied with a letter stating that they were all seedlings.

October 10*th.—Exhibited.* From Messrs. Hovey, Dahlias. Dahlias from S. Sweetser. From J. A. Kenrick, dahlias. Flowers from Wm. Kenrick. Dahlias, Amaryllis belladónna and Hæmánthus coccínea, from M. P. Wilder.

From Judge Buel, Albany, Downton Pippin, Rosinkruger, Pigeon Rouge, Alexander, and King of the Pippins apples. From Messrs. Hovey, Heathcot and a pear, name unknown. From Charles Bowen, Pomme d'api (Lady) apples, and St. Michael pears. From Charles French, Braintree, Sweet apples. From John Prince, Roxbury, Naumkeag pears. From J. Lowell, Tillington and Urbaniste pears. From Dr. Shurtleff, Urbaniste pears, and a kind the name unknown. From Stephen Williams, Northboro', three varieties of apples and one of pears, (names unknown).

From Messrs. Winship, Capiaumont and Croft Castle pears (the latter one of Mr. Knight's seedlings; very fine). From S Philbrick, Wilkinson, Urbaniste and Tillington pears. From M. P. Wilder, Van Mons pears. From Madame Dix, Dix pears. From John Clapp, Reading, Seckel and Platt's Bergamot pears; several kinds of apples. From Dr. Robbins, red apples (unknown).

From R. Manning, Buffum, Rousselette de Rheims, Urbaniste, Washington, Heathcot, Green Yair, Jalousie and Belle Lucrative pears (the latter one of the finest varieties); Imperial violet, Antwerp, and Quetsche d'Italy plums; Lyscom and Snow apples; seedling blood peaches. From I. Ames, Boston, Black Hamburgh and White Chasselas grapes.

From Daniel Chandler, Mangel Wurtzel. From J. Clapp, Tuscarora corn.

Oct. 17*th.—Exhibited.* Dahlias from M. P. Wilder. From S. Walker, dahlias. Bouquets of flowers, dahlias, and heartsease from Messrs. Hovey. Dahlias from S. Sweetser. Flowers from J. E. Teschemacher.

Art. VI. *Meteorological Notices.*

FOR SEPTEMBER.

The month of September was delightful throughout, and much more favorable than in seasons in general. Southerly winds prevailed. Quantity of rain very small.

Thermometer.—Mean temperature, 53° 17'. Highest, 70°; lowest, 34° above zero.

Winds.—N. E. four days—E. six—S. E. three—S. one—S. W. eleven —W. two—N. W. three days.

Force of the Wind.—Brisk, nine days—light, twenty-one days.

Character of the Weather.—Fine, eight days—Fair, fifteen days—Cloudy, seven days.

Rainy, three days—*Showery*, three days.

MONTHLY CALENDAR
OF
HORTICULTURE AND FLORICULTURE,
FOR NOVEMBER.

FRUIT DEPARTMENT.

Grape vines in the green-house or grapery, from the late fine weather, will have ripened their wood exceedingly well. Tie up the shoots rather close, that the plants underneath may have all the benefit of the sun; pick off the leaves and petioles as soon as they appear like falling (pp. 46, 93, 125, 170).

Vines in the open air should be pruned where it was not done last month. Isabella and Catawba grapes are but just ripe; but the fine weather has given them a good flavor.

Strawberry plants that were set out in September, have become now finely rooted: as soon as severe frost appears they should, if convenient, have a slight covering of leaves, straw, hay or coarse manure thrown over the beds (p. 299).

Raspberry bushes should be prepared, ready to be covered on the approach of frost.

Transplant trees at this season, if there is a want of time in the spring: they will now do well.

FLOWER DEPARTMENT.

Hyacinths, Tulips, Narcissus, Crown Imperials, Lilies, Crocuses, Gladioluses, &c., should be all planted this month, if possible; as they get better rooted than when planted later (pp. 408, 413).

Roses should now be put into pots for forcing; choose a rich soil.

Ranunculuses should be planted this month; the spring will not do so well in our climate. They like a strong soil.

Chrysanthemums, in pots, should now be neatly tied up to small sticks, and removed to the green-house or parlor (p. 133.)

Camellias should have their leaves washed, and the soil in the pots top-dressed; plant the seeds at this time (pp. 133, 134).

Mignonette, in pots, should have but little water for fear of the plants damping off.

Carnations, Auriculas, and young Polyanthus plants, should be set in a frame, and protected from severe cold, snd storms of snow.

Amaryllis formosíssima and Tigrídia pavònia and conchiflòra should be taken up immediately, and placed away from frost; the former in dry papers, and the latter in moist sandy loam.

VEGETABLE DEPARTMENT.

Brick Pits for cucumbers, melons, &c., should be built this month, and every thing put in readiness for forcing (p. 401).

Lettuce plants should be set out in frames, where it was not done last month.

Radish seed sown now in a hot-bed, will come into use in January and February.

Asparagus beds should be covered with three or four inches of coarse, strawy manure.

Cauliflowers for an early crop should be protected by frames.

Celery plants should be now earthed up as much as possible, as they will have nearly done growing.

THE

AMERICAN
GARDENER'S MAGAZINE.

DECEMBER, 1835.

ORIGINAL COMMUNICATIONS.

ART. I. *Autumnal Cryptogamic Plants.* By J. L. R******.

WINTER, with its icy magnificence, has at length begun, and we have retired from the pleasant walks of the garden and the delightful rambles over hill and dale, and through the tangled wood, to the warm fireside. A great, though usual change has taken place in the vegetable world; the greenhouse and conservatory must now impart that instruction through their many-leaved and sybil-tongued inmates, which was but a few weeks ago breathed forth from every green and living thing. We talk much of the solitude of nature, and of the ravages of dreary winter; of the sad and fading livery which she puts on; of the melancholy reflections which the departing year calls up. And yet is it so? Is any thing imperfect in her operations. The fault lies with ourselves, and not with her;—harmony, beauty, order, excellence, ever mark her operations. The unchanging order of the rolling year should, to a reflecting mind, bear much that is good and instructive. Point out, if you can, aught that is not in perfect harmony with order and wise design. Each month, each day, has its peculiar source of happiness, and is capable of affording, to such a mind, that genuine and refined delight which especially belongs to the study of the natural world.

The month which has just past, concluded the unusually fine autumn of the present year. The late rich display of the autumnal "King of Flowers," the gorgeous dahlia, has been unequalled for several years in this section of the country. Some of these plants are still,* in sheltered situations, displaying their flowers uninjured by the frost ; and the more common, though no less foreign, cultivated plants of our gardens still unfold their petals amid the decaying and preparatory hybemating changes of their hardier companions.

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*November 7th.

A floral catalogue of the lingering blossoms of the year may be as useful to point out the general state of the weather, as are those of the first approach and gradual advancement of spring. As an interesting occupation to the florist and horticulturist, such a diary might be recommended; taking care, however to state the location and circumstances of the spot or garden in which it was kept.

Thus up to the date first given, I observe in a garden not by any means protected from the access of the frosts, Phlóx scàbra, P. pyramidàlis álba, Gília capitàta, Tropæolum màjus and var. atrosanguíneum, Mesembryánthemum lùcidum, Nicotiàna decúrrens, Coreópsis tinctòria (Callиópsis bícolor,) Xeránthemum ánnuum, Dephínium elàtum and Ajàcis, Tradescántia virgínica with several Cruciferæ ; while premature flowers have appeared on Cydònia japónica, rendering it quite an object of autumnal beauty.

Autumn and winter are the seasons for the humbler but no less beautiful productions of the floral kingdom, the fugacious yet vivid Fungi, the curious and almost apparently desiccated Lichenes, and the tiny delicate Musci ; and those who reside on the coasts can find elegant marine Algæ loosened by the winter storms, and cast at their feet for almost endless study.

Under the decaying foliage, or springing up among it, or clothing the decomposing and prostrate trunks, are the wonderful mushroom tribe : whose whole existence, in many species, is confined to a few hours, and whose rich unrivalled beauty almost fades while we gaze. Unlike the Phænogamous plants, in the absence of the glossy or delicate green foliage, or perfectly formed flower, nature seems to have compensated for these deprivations, in the lavish manner with which she has scattered magnificent coloring upon their simple forms. Let the naturalist, therefore, lay aside any fastidious notions which he may entertain respecting these humbler links in the vegetable world, and he will, nay cannot do else than admire, while his admiration will insensibly lead him to the study of their almost magic transmutations.

I have myself been for a moment surprised by the splendid Pezòza coccínea, a common fungus, in the woods of the fertile west, supposing it some new and rich flower, mocking the tints of the brilliant Mexican sage (Sálvia spléndens.) Who has not observed the golden, and orange, and purple, and vivid red Bolèti, which springs so luxuriantly in damp and sheltered situations under our forest trees ; or the elegant velvety and agate-ribboned Auriculareæ, or the tawny sponge-like Clavàriæ. There, too, is the singular Nidulària, which you may find in great perfection on decayed posts, or the decomposing wooden rail of the flower border, if not better provided with the living, glossy and antiquated box, and I have even known it to spring up on the slender stick of a pot-plant, as if forcing itself into notice by associating with the more general favorites of its sister.vegetables. This is an elegant fungus ; resembling, as its name imports, a nest, and the sporangia, the eggs. These *sporangia*, (kidney-shaped bodies, which in some species are furnished with elastic umbilical cords or filaments) contain the *sporules*, or incipient germs of the future plant, and are analogous to seeds or still more to the minute bulb-like buds of germiferous stems. And should your ramble carry you to some dry sandy plain, you may there find, blowing about in the wind, the singular Geàstrum, or "star of the earth," with a double peridium, the outer being hygrometric, and like the far-famed Rose of Jericho (Anastàtica hierochùntina,) will expand or close as moistened or dried. And still no less curious, yet far more philosophically mysterious, is the rapidly evolving, and as rapidly decaying Phallus, one species of which (P. impùdicus,) is too often an intruder among the odors of the garden, scenting the air with its ammoniacal fumes for several rods around. If you have found it, pluck it fearlessly, and use it as a gayer bouquet ; the astonishing fetor becomes, on nearer acquaintance, a pleasant and rather agreeable scent. A late English botanist mentions the fact, which was first noticed by Greville, and to his testimony I may add my humble own.

But if you are tired of the frail offspring of a silent night, which perish as rapid as they grow, you may delight your mind and feast your eyes on the verdant carpet of those rich green mosses which are spread over that half concealed rock, or are creeping in exuberant beauty upon the living stems of the noble sons of the forest ; or those gray beard lichens, giving the appearance of honorable and honest age to the pendent branches of others less lofty. Nay, even the paling of the fences which you pass, the unshapen rocks of the neighboring wall, the sides of yonder venerable barn and no less ancient family cottage, are covered with lettered inscriptions of time and Flora's busy and united labors. Read and learn, from nature's volume, which even dreary winter cannot shut from your contemplation : or perhaps a lingering and yet verdant fern has attracted your notice, or the ceaseless babbling brook, not yet subjected to the bondage of the conquering frost, contains many a beautiful and beaded filament of some evergreen Confervæ, the last rudimental type of the vegetable kingdom.

The faded leaf, the perfect articulation of the now dropping petiole, the gorgeous livery of the autumn scenery, are all the subjects of the botanist's study. Themes of praiseworthy admiration, monitors of good, eloquent and instructive teachers of immutable truth, are they all, and no season can fail to introduce them to our attention.

Yours, J. L. R******.

Salem, 1835.

ART. II. *On the employment of Ornamental Trees and Shrubs in North America; more particularly the indigenous Species and Varieties, as regards their effect in the formation of Parks and Pleasure Grounds, and extensive Plantations of Landscape Beauty.* By A. J. DOWNING, Botanic Garden and Nursery, Newburgh, N. Y.

THE following article, by one of our correspondents, appeared, some time since, in one of our agricultural periodicals, and has lately been translated into French and published entire, by the editor of that most excellent work, the *Annales de Fromont.* As it is a subject upon which there is a great want of information, and as the article, at the time it appeared, was not probably seen but by few of our readers, we republish it, and are happy in being able to append some additional remarks which we have just received from the author. It is almost unnecessary for us to enlarge upon the subject, as it has been handled by so able a pen: but we may here be allowed to give a few hints upon the importance of a better acquaintance with our indigenous trees and shrubs, and the value of such an acquaintance to gentlemen who are desirous of improving the appearance of their plantations, and to amateurs and practical gardeners who would wish to beautify, to the greatest degree, a small extent of ground. The more general adoption of our native trees in ornamental gardening, and their merits compared with exotics, we have before touched upon (Introduction, p. 5,) and intended to have again reverted to the subject as soon as time and the opportunity would permit; but other and pressing engagements have prevented this, and it is with the greater pleasure that we are thus early able to offer the following, which so exactly corresponds with our ideas. The sublime scenery of our country as left by nature, we can even boast of; its high picturesque character we shall never cease to admire. But shall the hand of man attempt no refinement? Shall our country residences be ornamented by nature alone? Shall we not call in the aid of art to beautify and give a finish to the scene? These are questions which, we fear, are rarely thought of by too many, even of those who lay considerable claim to a taste for landscape gardening when planting their grounds. A love of rural scenery has been superseded by a love of exotics, and a desire to possess the tender productions of warm climes, which need great care and attention; these are gay objects, and attract our admiration; but they are not in place when we have done nothing to soften the character of their habitation; they should be accompanied with neat gravel walks, smooth, soft, deep green turf, beautiful flowering shrubs, and interesting forest trees; formed and planted so as to show that the garden is a place to display art in the highest degree of perfection, and that it should never be mistaken for a state of nature. Let it be the object of every one interested in the progress of landscape gardening, yet in its infancy, to impress upon those who are the fortunate possessors of beautiful situations, the importance of giving more attention to ornamenting their grounds; and not intermix promiscuously all sorts of trees, without any reference to their beauty when they have attained a few years' growth. The vernal tints of the foliage of the different species of the oak, as well as their varied autumnal shades, are worthy of study (*Loudon's Gard. Mag*. Vol. X., pp. 200, 201, &c.) and attention. But we have extended our remarks too far, and hasten to give those of our correspondent.—*Conds.*

It is remarkable that, notwithstanding the rapid progress which horticulture is making in the United States, so little attention is paid to the planting ornamental trees, with a view to the embellishment of our country residences. The magnificent parks of England have been long and justly admired, as constituting one of the most beautiful features of that highly cultivated country; and although the horticultural creations of our more limited means, may never equal in extent and grandeur some of those of the aristocracy of Europe, yet every person of cultivated mind, is aware how beautiful the hand of taste can render even very limited scenes, by the proper application of the principles and materials necessary to mental pleasure and gratification.

Consider in a single point of view, what an infinite variety of beauty there is in a tree itself! Every part is admirable, from the individual beauty of its leaves, to its grand effect as a whole. Who has not witnessed in some favorite landscape, the indescribable charm thrown over the whole scene by a single tree ? Perhaps a huge giant, whose massy trunk and wide out-stretched arms have been the production of ages ; or the more graceful form of another whose delicate foliage reflects the sunbeam, and trembles with the slightest breeze that passes over it. There is no monotony in nature—even in trees, every season has its own charms. Spring, the season of renewed life, witnesses the rush of the newly imbibed sap—the buds swell—the tender leaves unfold, and the admirer of nature is delighted by the freshness and vividness of the young foliage. Summer comes—he is refreshed by the fragrance of their blossoms—their shade is a welcome luxury in the noontide sun—perchance their fruit may be an acceptable offering to the palate—and who in this country has not witnessed the autumnal glories of an American forest ?

There is no country of the globe which produces a greater variety of fine forest trees, whether considered for the purposes of ornamenting or timber, than North America. Yet it is a fact that for both these purposes, more particularly the first, they are horticulturally better known in many parts of Europe, than they are now at home. Those governments have imported the seeds of all our most valuable forest trees, annually, for more than a century. Instead of planting, our agriculturists have hitherto been engaged in destroying. In the Atlantic States, this period is now past ; and we would, therefore, first direct the attention of the arboriculturist to our own trees.

There is not in the whole catalogue, scarcely a more interesting object than an immense oak tree, when placed so as to be considered in relation to the large mansion of a wealthy proprietor. Its broad ample limbs and aged form, give a very impressive air of dignity to the whole scene. It is a very common inhabitant of our woods, there being 44 species of indigenous growth between the 20th and 48th degrees of north latitude.* The pendulous branches of the American elm—the light foliage of the birch—the cheerful vernal appearance of some of the species of maple—the delicate leaf of the locust, and the heavy masses of verdure produced by the beech, are sufficient to render them all ornamental in park scenery, and they should even find a proper situation in an extensive lawn. Our American poplars should be recollected, when a rapid growth and immediate effect is required. *Gledítschia* triacánthos, or the sweet locust, is interesting from its long masses of thorns. One of our most ornamental trees, both in foliage and flower, is the white wood Liriodéndron Tulipífera. Its erect, tall form, large yellow blossoms, and handsome leaves, have rendered it an universal favorite in Europe, and there can scarcely be a more stately object to stand as an isolated specimen. The plane or sycamore (Plátanus occidentàlis) is too much neglected because it is so common; but in favorable situations, in deep soils, and where ample room is afforded, it produces a noble tree of immense size. Several have been measured on the banks of the Ohio from forty to fifty feet in circumference.

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*Michaux.

A native tree, but litle known in our ornamental plantations, is the Kentucky coffee, *G*ymnócladus canadénsis. It is a native of Kentucky and Tennessee, grows to the height of forty feet, and its doubly compound foliage, and very singular appearance when defoliated in the winter months, are well calculated to render it an interesting feature in the landscape. *C*upréssus dístichum (Taxòdium *Rich.*,) the deciduous cypress, flourishing in vast quantities in the southern parts of the Union, is, though perfectly hardy, and of easy cultivation, but little known in the Northern States.* Its beautiful light green foliage contrasts elegantly with the denser hue of other deciduous trees, and we are hardly aware of an upright growing tree, better calculated to give variety of color to groups and masses, than this. *Catálpa* syringæfòlia is a most striking ornament to a lawn, when in the summer months it is loaded with its large clusters of parti-colored flowers.

But the most splendid, most fragrant, and most celebrated ornamental production of the woods and forests of our country, is yet to be mentioned. It is the unrivalled Magnòl*ia* grandiflòra, the most magnificent of the genus, a beautiful tree of seventy feet in its native soil, only attains the size of a large shrub in the Middle States, and will scarcely withstand the winters of the Northern. But M. acuminàta, though not so beautiful, is a fine large tree, sometimes attaining the height of ninety feet. It is abundant in Western New York and Ohio. M. macrophylla is not only remarkable for the beauty of its flowers, but also for the extraordinary size of its leaves; they having been measured so long as three feet. M. tripétela, the umbrella tree, is also a fine species growing in districts from Georgia to New York; its large cream-colored flowers measure seven or eight inches in diameter. Still more rare, though highly ornamental, are M. cordàta and M. auriculàta; small trees which ought to be indispensable to every collection. The species of smallest stature and most frequent occurence in the Middle States, is M. glaúca, the flowers of which are highly odoriferous. It succeeds best in damp soils, and is found very plentifully in situations of this kind in New Jersey.

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*We have seen a celebrated specimen in Col. Carr's garden, Philadelphia, 180 feet high, 25 feet in circumference, and 91 years old.

Ornamental trees from other countries should find a prominent place in the plantations of our horticulturists. They not only have an intrinsic value in themselves, but, to a refined taste, they offer gratifications from the associations connected with them. Thus the proprietor may view, in the walks over his grounds, not only productions of his *own* country, but their fellows from many other climes. We may witness flourishing upon the same soil, many of the productions of southern Europe and Asia; individuals from the frigid regions of Siberia, and the almost unknown forests of Patagonia; vegetables which perseverance has abstracted from the jealous Chinese, and which the botanical traveller has discovered among the haunts of the savage Indian.

Among the foreign trees which are most generally cultivated for ornament in this country, we may mention the two genera of *T*ilia and *Æ*sculus. The European lime or linden tree, with its fine stately form and fragrant blossoms, is a most pleasing object as an ornamental tree. The horse chestnut (*Æ*. hippocrástanum) is perhaps better known than any foreign tree in the country; its compact growth, fine digitate leaves, and above all, its superb, showy flowers, distributed in huge buoquets over the foliage, have rendered it here, as in Europe, an object of universal admiration. We would here beg leave to direct the attention of planters to the less known, but not less interesting species of this tree, natives of our own soil. *Æ*. pàvia, producing red, and *Æ*. flàva, yellow flowers, form very beautiful trees of moderate size. The other species are rather large shrubs than trees, and are very pretty ornaments to the garden.

The brilliant appearance of the European mountain ash (Sórbus aucupària,) when in autumn it is densely clad with its rich crimson fruit, is a circumstance sufficient to give it strong claims to the care of the arboriculturist, independently of the beauty of its foliage. But a tree, which, from this latter property has long been a favorite with us, and which, though it is common in Europe, we regret to say is yet but half so well known as it should be, is the silver leaved abele, *P*ópulus álba. Its growth is very rapid, and it is, therefore, well adapted for planting, where time is an object of consideration. The flowers are insignificant, but its leaves are highly interesting. The under side of each of these is rendered perfectly white by a dense cottony pubescence, and in a gentle breeze, from their being supported on slender petioles, they are in constant motion. At a moderate distance to a spectator standing on the windward side, they give it frequently the appearance of being covered with a profusion of white flowers. It has a beautiful effect from the house, when seen at some distance in the foreground of a handsome group of trees of a darker green. Added to this, it holds its foliage unscathed by the frost, until the very latest period in autumn.

Ailántus glandulòsus, the heaven tree of the Chinese, is a fine stately tree, and though introduced from a warmer climate, bears the intense cold of our winters perfectly uninjured. When young, it somewhat resembles our sumach, but when it attains the height of 90 or 100 feet, with its long, pendent pinnated foliage, it will form a very picturesque and graceful object.

We must not forget, in this brief notice, the larches both of Europe and our country. *P*ìnus làrix has long been considered among the first timber trees of the other continent. The singularity of its foliage, as a deciduous tree, its long declining branches and drooping spray, are well calculated to give variety to the landscape, and we are happy to see, that both this and our two American species, *P*. microcárpa and *P*. péndula, are becoming more generally objects of attention and cultivation.

Among the interesting trees of more recent introduction, and which are yet rare in this country, we may mention Salisbùr*ia* adiantifòlia, the Japanese maiden-hair tree. The foliage is strikingly singular and beautiful, resembling that well known fern, Adiántum pedàtum, and the tree appears to be very hardy. The purple beech, a variety of *F*àgus sylvática, is a very unique object, with its strangely colored leaves; and a very splendid tree lately introduced from the banks of the Missouri and Arkansas, is the Osage orange (Maclùra aurantiàca.) Its vivid green leaves and rapid growth are already known to us; but it is described as being a tree, in its native soils, of thirty or forty feet in height, and bearing abundance of beautiful fruit, of the size and appearance of an orange. The weeping ash is also a very unique and desirable object, and its long seemingly inverted shoots may be introduced in some situations with an excellent effect.

We have often regretted that, in decorating the grounds of country residences, so little attention is paid by the proprietors, to hardy evergreen trees. Ornamental at any season, they are eminently so in winter—a period, in this latitude, when every other portion of vegetable matter yields to the severity of our northern climate, and when those retaining their coats of verdure uninjured are beautiful and cheerful memorials of the unceasing vitality of the vegetable world.

Deciduous trees, at this season, present but a bleak and desolate aspect—a few evergreens, therefore, interspersed singly over the lawn, or tastefully disposed in a few groups, so as to be seen from the windows of the mansion, will give a pleasing liveliness to the scene, which cannot fail to charm every person. We would earnestly advise every person engaged in ornamental planting, to transfer some of our fine native evergreen trees to their lawn, park or terrace. We are aware that many think that there is great difficulty in transplanting them with success, but experience has taught us that, with the following precautions, no more difficulty is found than with deciduous trees. In transplanting, choose the spring of the year, at the time the *buds are swelling: cut as few of the roots as possible, and do not suffer them to become dry before you replace them in the soil.* Among our most ornamental evergreen trees may be mentioned the different species of pine, natives of North America. Several of them are fine stately trees, and one which is particularly ornamental as a park tree, is the white or Weymouth pine, *P*ìnus stròbus. *P*ìnus rígida, when old and large, is a very picturesque tree; and *P*ìnus álba, rùbra et frasèri, the white, red and double spruce firs, are trees of moderate size, very generally diffused in the Middle States, and easily obtained. The well known balsam fir, *P*ìnus balsàmea, is such a beautiful evergreen, and succeeds so well in this climate, that it should find a place in the smallest plantations. We have observed it thriving well even in confined spaces in cities. *T*hùja occidentàlis, the arbor-vitæ, is a very interesting tree, and, as well as the exotic *T*. orientàlis, will be considered very ornamental in districts where it is not common.

Among the most ornamental foreign coniferous trees, we will notice the Norway spruce, the drooping branches of which, in a large specimen, are so highly admired; the well known Scotch fir, the finest timber tree of Europe, celebrated for growing on thin soils; and the beautiful silver fir, *P*ìnus pícea; all of them are noble trees, and as they can be readily procured at the nurseries, should be found in the grounds of every country residence.

Several other species of this genus are thought the most beautiful trees of Europe, unfortunately are yet scarce in this country. The stone pine, whose seeds are a delicious fruit, and whose "vast canopy, supported on a naked column of immense height, forms one of the chief and peculiar beauties in Italian scenery, and in the living landscapes of Claude," and the not less interesting *P*ìnus Pinàster and *P*. Cémbra of the mountains of Switzerland. But the most desirable evergreen tree, which flourishes in temperate climates, is the classic cedar of Lebanon, *P*ìnus cèdrus. Its singular ramose branches and wild picturesque appearance in a large specimen, give a more majestic and decided character to a fine building and its adjacent scenery than any other tree whatever. It is a native of the coldest parts of Mount Libanus, but according to Professor Martyn, more trees are to be found in England at the present time, than on its original site. As it is scarcely yet known as an ornamental tree in this country, we certainly do not know of an object better worth the attention of the arboriculturist.

We observe, in foreign periodicals, that several magnificent hardy individuals, belonging to this section of trees, have been lately introduced into Europe, and we hope before long, they will find their way to the hands of *our* cultivators. Among the most remarkable, we may mention a splendid new genus of pine (*P*ìnus Lambert*iàna*,) lately found in northern California. The discoverer, Mr. D. Douglas, botanical collector to the London Hort. Soc., describes it as growing from one hundred and fifty to two hundred feet in height, producing cones sixteen inches in length. He measured a specimen two hundred and fifteen feet long and fifty-seven in circumference.* Several other specimens of this genus, of much grandeur and beauty, are but lately introduced into cultivation, and which our present limits will barely permit us to enumerate. *P*ìnus Douglás*ii*, *P*. montícola, *P*. grándis, are immense trees from the north-west coast of America; *P*ìnus deodàra [*C*édrus *deodàra*, Rox.,] from Himalaya, *P*. taùrica, from Asiatic Turkey, and *P*. Làricio, from the mountains of Corsica, are spoken of as being highly ornamental; Araucària imbricàta, a beautiful evergreen tree of South America, and *C*upréssus péndula, the weeping cypress of the Chinese, are extremely elegant—are found to withstand the climate of Britain, and would probably also endure that of this country.

We cannot close these remarks without again adverting to the infinite beauty which may be produced by a proper use of this fine material of nature. Many a dreary and barren prospect may be rendered interesting—many a natural or artificial deformity hidden, and the effect of almost every landscape may be improved, simply by the judicious employment of trees. The most fertile countries would appear but a desert without them, and the most picturesque scenery in every part of the globe has owed to them its highest charms. Added to this, by recent improvements in the art of transplanting,† the ornamental planter of the present day may realize almost immediately what was formerly the slow and regular production of years.

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* Trans. Linnæan Soc., v. 15, p. 497.

† Vide Sir Henry Stewart on Planting.

Additional Note.—The beauty of our autumnal foliage is well known to the whole world: it has long been the theme of admiration with the poet and the painter, and, to a foreigner, it appears to be one of the most superb features of this fresh "green forest land." Yet, every year, the axe of the woodsman erases wide masses of the rich coloring from the panorama. Will it not be worth the consideration of persons who are now making, or who, in many parts of the country, before much time has elapsed, will make extensive plantations of forest trees for ornament, shelter and profit, to consider how splendid an effect may be produced, by a disposition of the most brilliantly colored of our indigenous trees in separate groups and masses, on the parks and lawns of extensive country residences? It is true, that autumn's gay colors remain with us but for a short time, but is this not also true with respect to the vivid greenness of vernal foliage, and the still more fugitive beauty of blossoms which constitutes one of the chief points of attraction in ornamental trees? We feel confident that, when landscape gardening shall arrive at that perfection which it is yet destined to attain in this country, this will be a subject of important consideration. The high beauty with which the richness of our autumnal tints may invest even the tamest scene, we were never more deeply impressed, than in travelling through New Jersey, the months of September and October, the present year. Every one is aware of the tame, monotonous appearance of a great portion of the interior of that State; but only those who have seen the same landscapes in autumn, can imagine with what a magic glow even they are enshrined in that season. The following are some of the trees we noticed, as assuming the richest hues in their foliage. Scarlet oak, (Quércus coccínea,) bright scarlet, dogwood (Córnus flórida,) and the tupelo and sour gum (Nyssa villósa, &c.) deep crimson, different species of Acer or maple, various shades of yellow and deep orange; the sweet-gum (Liquidámber) reddish purple, and our American ash, a distinct sombre purple. These are but a few of the most striking colors; and all the intermediate shades were filled up by the birches, sycamores, elms, chestnuts and beeches, of which we have so many numerous species in our forests, and the whole was thrown into lively contrast by a rich intermingling of the deep green in the thick foliage of the pines, spruces and hemlocks.

Yours,

A. J. Downing.

Botanic Garden and Nursery,
Newburg, N. Y. Oct. 30, 1835.

ART. III. *Beautiful Plants growing wild in the Vicinity of Boston.* By E. B. KENRICK, Watertown.

(*Continued from page* 418.)

All these plants are perennial, unless intimation is given to the contrary.

OXALIS.

Oxalis violàcea. Violet wood sorrel. "A handsome species." Leaves heart-formed, with the pointed end at the stem, like the other species of this genus. Flowers violet-colored. The leaves and flowers of this plant are much larger than those of our common wood sorrel.—Rare.—Rocky woods, Brookline, Connecticut; also, has been found near Nonantum Hill, Newton.—April to June.

PEDICULARIA.

Pediculària canadénsis. Wood Clover. One of the most showy of our early flowering herbaceous plants; especially where it grows in patches in woods or pastures. It has exactly the taste of red clover; though its appearance is very different. Stem erect, less than one foot high, downy at top. Leaves dark green, lanceolate, with scolloped obtuse lobes, or leaves cut-winged, gash-toothed. Flowers in a head-formed spike, terminal, hairy, leafy at base. Calyx five leaved, cut downwards; corolla yellow, or purple, or both; the upper lip forming a long helmet, its point square, with a small acute tooth on each side, while the lower lip is three lobed. The flowers turn to the right, so that the spike has a twisted appearance. Generally, several stems grow from one root; which adds much to the show.—Woods and pastures.—May to July.

POGONIA.

Pogònia ophioglossoìdes, or *Arethùsa ophioglossoìdes.* Snake-mouth Arethusa. A curious little plant, with a flesh-colored flower, in the form of a snake's head. Root fibrous. Stem erect, one flowered, rarely two flowered. Leaves two; one of them near the middle of the stem, oval, and sheathing at base; the other near the flower, oval-lanceolate, and much smaller than the former. Flower light purple, nodding, the lip of its nectary fringed at the edge, and spreading.—Meadows.—June, July.

POLYGALA.

Polygala paucifòlia. Fringed Polygala. A beautiful plant, three or four inches high, with purple flowers. The leaves grow mostly at the top of the stem; and immediately above are seen three or four very handsome purple flowers, crested somewhat like a cock's comb. Calyx leaves five, the uppermost swelled out at the base, and somewhat acute; the two next, longer than the corolla, narrow at base, wider and obtuse at top; the two remaining ones small, acute, and white. Corolla purple, pea-blossom shaped; the middle lobe white, with a purple crest.—Woods, Brookline.—Rare.—May.

PONTEDERIA.

Pontedèria cordàta. Pickerel weed. The tall blue spikes of this very beautiful, but rather common species, are very conspicuous on the borders of rivers and ponds of deep water, with muddy bottoms. Stem upright, one or two feet high, fleshy, cylindrical. Leaves three or four inches long, heart-shaped, very smooth, with convergent nerves; stem-leaf sheathing at the base of its stalk. Flowers blue, crowded into a long, cylindrical spike.—Fresh water.—Fresh Pond, &c.—July, August.

A variety, *angustfòlia*, has elongated, triangular leaves, somewhat heart-shaped and cut off at base.

RHEXIA,

Rhéxia virginica Meadow Beauty. Deer Grass. Stem square, one foot high, with winged or membranous angles, and scattering hairs. Leaves opposite, stemless, ovate-lance-formed, three-nerved, sprinkled with closely pressed hairs on both sides; the margin of the leaf being more or less notched, and having parallel hairs, like eye-lashes. Calyx urn-shaped, hairy, cleft into four sharp-pointed segments. Petals four, of a delightful, fresh, rosy purple, finely contrasted with very showy, long, curved, bright-yellow anthers. Style arching.—Low grounds.—Rather scarce.—Brighton.—July, August.

RUDBECKIA.

Rudbéckia laciniàta Cone disc Sunflower. A tall plant, resembling the sunflower. Stem upright, round, sleek, from five to eight feet high, branching. Leaves rough; the lower ones with stems, and so deeply cut, or scolloped, as to form (almost or quite) about five distinct leaflets, or lanceolate, gash-toothed segments, the tip leaflet being the largest; upper leaves nearly stemless, egg-shaped, twice cut. The calyx has about eight scales or segments. Rays of the flower yellow, lanceolate, drooping; disc or centre of the flower greenish, conical.—Swamps, and wet meadows.—Near Newton Corner.—August.

SAGITTARIA.

Of this genus we have at least three species growing wild near Boston, namely, the *Sagittària sagittifòlia*, with large arrow-shaped leaves, and the *S. acutifòlia* (a dwarf species,) with small, grass-formed leaves, both of them growing at Fresh Pond; also, the *S. heterophylla* (found at Newton,) with differently shaped leaves on the same plant—some of the leaves being grass-formed, or awl-shaped, and others being more or less arrow-formed. But among these, the most conspicuous is the

Sagittària sagittifòlia Arrow Head. Stem from one to two feet in height. The root is fleshy, and has been used as food, in times of scarcity. The leaves are from the root, and are large, smooth, whole and even on the edge, and very distinctly arrow-shaped, the point and barbs of the arrow being acute. The scape or main flower stem is somewhat triangular, bearing its flowers in whorls of three flowers each, on undivided foot stalks. Petals three, white, roundish, very thin, and soon falling off.—Sides of ponds, brooks, ditches, &c. July,—August.

Of this species, we who live near the metropolis, have not fewer than two or three varieties. We have the *latifòlia*, having its arrow head broad, ovate, swelled out in the middle, and rather blunt-pointed, with the barbs ovate, straight, and slightly drawn out at their points ; likewise, the *grácilis*, having a very elegant arrow-shaped leaf, the body, and the point of the arrow head being very slender, and the barbs very long, slender, spreading, and acute.

SARRACENIA.

Sarracènia purpùrea Side-saddle Flower. The whole of this genus are plants very singular in structure. The leaves of the present species are numerous, and all from the root. Each leaf is a kind of cup, or shoe, formed of a tube, contracted at the mouth or top (where there is a heart-shaped appendage), swelled out in the middle, and contracted and curved downwards, till it ends in the stem. A full-grown leaf will hold a wine-glass of water, and is rarely found empty. The scape or leafless flower stem is sometimes a foot high, or more, and bears a single, nodding blossom, no less peculiar than the leaf. The exterior calyx has three small leaves ; the interior calyx has five ovate, obtuse, shining leaves, of a brownish purple. The petals are five, obtuse, guitar-shaped, being repeatedly curved inward and outward, and are finally bent over the stigma, which, in this flower, is a broad circular shield, or awning, raised over the centre of the flower. The petals are brownish purple on the upper side, and greenish purple below.—Mossy swamps and meadows.—June, July.

An indigenous variety of the present species, has its flowers yellow.

SENECIO.

Senècio aùreus Golden Senecio. This is a handsome species, and makes a fine appearance in the early part of our flowering season. Stem erect, smooth, undivided, and from one to three feet high. Leaves of the root on slender foot stalks, smooth, heart-shaped, ovate, notched on the margin. Upper leaves simply pinnatifid, as if pieces were deeply cut out at the sides, somewhat comb-fashion ; middle leaves pinnatifid, with a rounded leaflet at the tip. Flowers golden yellow, with rays ; and growing in corymbs, or flattish-topped, and somewhat umbrella-shaped heads. Calyx smooth, dark, often striped.—Meadows.—May, June.

SILENE.

Silène pennsylvánica Pink Catchfly. Sometimes called *Wild Pink*, from its similarity in habit to some of that genus. Stems numerous, about six, and sometimes even twelve inches high. Leaves of the root spatulate, or acute at top, and tapering into a long base ; those of the stem lance-formed, opposite. Flowers reddish pink color, in upright, terminal bunches. Calyxes nearly cylindrical, hairy, and glutinous. Petals five, wedge-formed, crowned at the mouth, and having long claws or petal stems ; also, more or less notched at the end, and scolloped on the margin.—Dry sandy woods.—Near Mount Auburn.—June.

SOLIDAGO.

Our species of *Solidàgo*, or golden rod, are very many. But in general, a plant may be known, at first sight, to be of this genus, by resembling our well known *Solidàgo odòra*, or Sweet-scented golden rod, employed in medicine, and usually termed simply *golden rod*. The species that are worth cultivating for their flowers, are not, perhaps, more than two or three.

Solidàgo altissima Tall golden Rod. Very common, but the most showy species of all. Stem from three to five feet in height, erect, stiff, rough, hairy, branching at top. Leaves numerous, stemless, lance-formed, rough, wrinkled, irregularly veined, and having teeth or notches pointing outward. Flowers small, but extremely numerous, golden yellow, about eight rayed ; with an oblong calyx, contracted at top, and having slender pointed scales or calyx leaves, lying closely over each other. The flowers are in bunches, flat (or shaped like branches of red cedar), and consisting of many smaller bunches, or one-sided panicles, with divided and subdivided flower stems, having the blossoms pointing upwards ; the whole inclining to one side.—Variable.—Field sides, &c. —September.

Solidàgo lævigàta Marsh Golden Rod. A tall inhabitant of salt marshes, where its large yellow tops are very showy in autumn. Stem thick, round, smooth, leafy, from two to five feet high, and commonly branching at top. Leaves fleshy, lance-formed, perfectly smooth, clasping the stem more or less, and having notches, or teeth on the margin ; root leaves sometimes at least, inverted egg-shaped. Flowers golden yellow, about ten rayed, and growing on numerous, one-sided, branching flower stems. Flowers large for the species, especially when cultivated. Salt marshes at Cambridge, &c. on Charles River.—September.

TEPHROSIA.

Tephròsia virgìnica, or *Galèga virgìnica* Tephrosia. A very handsome plant. It is wholly covered with a pale-green down. Stem round, rising to the height of about one foot. Leaves pinnate (or compound, like locust leaves), from eight to twelve pair growing in rows on the sides of one common leaf stem, at different distances from its foot, besides an odd leaf at the tip; leaflets pale-green, oblong-oval, tipped with a bristle. Blossoms very beautiful, growing upon divided, terminal flower stems. Calyx hairy, red, and having awl-pointed divisions. Flowers pea-blossom-shaped, with the banner yellowish-white, downy, the wings red, and the keel red, and whitish. Pod slender, and crooked backwards.—Rare.—Grows in bunches in the driest sandy woods.—Near Newton Theological Seminary.—June, July.

VERNONIA.

Vernònia noveboracénsis Flat Top. A showy plant from four to six feet high, Stem furrowed, purplish, often branching at top. Leaves very numerous, standing disorderly, with short stems; rough, paler beneath, lance-formed, finely notched, and having a sharp elongated point. Flowers numerous, looking like miniature, purple, thornless thistles, but darker, forming, collectively, a large, round, flattish, hollow top, of which the flower stalks spring from different heights on the main stem, and are some of them branching.—Low moist grounds.—South border of Charles River, above Watertown bridge.—August, September.

VIOLA.

We have at least ten species of violets growing wild in the environs of Boston. It is not easy to decide which of these are the most eligible for cultivation. I shall therefore give a brief description of each, leaving the floriculturist to make his own selection. The different species of this favorite flower resemble each other in so many points, that a person acquainted with one or two species, can seldom be at a loss whether any particular plant be a violet, even if it be out of blossom.

Viola lanceolàta Spear-leaved Violet. Stemless. Root creeping. Leaves smooth, lance-formed, rather blunt-pointed, slightly notched on the rim, and having their stems tapering, Flowers inodorous. Petals white, greeenish at base, the two lateral ones striated with purple.—Common in wet meadows.—May.

Viola blánda Sweet-scented white Violet. Stemless. Root creeping. Leaves smooth, flat, scolloped on the rim, and either ovate or broad heart-shaped, with the hollow rounded; leaf stems semi-cylindrical. The flowers look exactly like those of the spear-leaved violet.—Meadows.—May.

Yours,

E. B. KENRICK.

Watertown, Sept. 9th, 1835.

(*To be continued.*)

ART. IV. *On the Cultivation of Gloxinia maculata.* By P. Q., Philadelphia.

SIRS—This, in my opinion, is the finest of all the gloxinias, when well grown. To insure its flowering every season, it will be necessary to attend to the following method of cultivation. At present, the plants are in that state when they require but gentle waterings; and about the first of December, I would prefer laying the pots on their sides altogether; as the tops of the old plants decay, they may be cut off (keeping them in the hot-house). About the first of February, suckers will be observed coming up around the edge of the pots, when they ought to be placed immediately upon their bottoms, and the young plants encouraged by gentle waterings, until the leaves are about half an inch in diameter; the old plants must then be shaken out of the pots, and as many of the strongest suckers preserved as may be wanted; from one pot, a hundred may be procured; plant them singly in thumb pots, in equal parts of peat and leaf mould, shifting into larger sizes as they grow, using the same compost. The plants require more moisture than many are aware of, and if pans of water are placed below each pot, it will encourage the growth of them very much. *A single leaf* of this species, when well grown, ought to measure at least *twenty* inches in circumference. It throws up its spikes of beautiful blue flowers, numbering from fourteen to twenty on each. The others, such as speciòsa, *var.* álba and hirsùta, are easily propagated by leaves; putting them in when the plants are in full bloom.

By encouraging the maculàta, while in a young state, by frequent shiftings, rests the flowering of them in September, October and November. Yours, &c. P. Q.

Philadelphia, November 8, 1835.

MISCELLANEOUS INTELLIGENCE.

Art. I. *Domestic Notices.*

The To Kalon Grape.—We understand, from a celebrated horticulturalist, of Albany, that Dr. Spafford's famous grape of this name is likely to prove synonymous with the *Catawba*, now so well known as one of the best of our native grapes.—*A. J. D.*, *Newburgh, N. Y.*, *Oct. 30th*, 1835.

[We have had this kind in bearing this season ; the parent variety of the plant having been received by ourselves from Dr. Spafford. We tasted the fruit in his garden at Lansingburgh several years since, and thought at the time it was synonymous with the *Catawba*, and so informed the Doctor, who thought us rather presumptive. Subsequently, however, and after the latter became better known to us, we thought we were in error. Dr. Spafford *personally* informed us that he raised it from seed (and he believed from a foreign variety), and it would be a singular circumstance if it should prove synonymous with the Catawba. Our grapes did not ripen sufficiently this year to enable us to decide correctly. It certainly has much the appearance of the Catawba, but we yet doubt its being synonymous. We were at Lansingburgh in the early part of October, and the grapes were then fully ripe. In this vicinity, Catawbas were not ripe, the same season, until the first of November. Another year will, we hope, enable us to settle this important question.—*Conds.*]

Magnòlia conspícua.—This beautiful variety of the Magnolia we have found to grow much more thriftily, blossom more abundantly, and withstand the severity of our winters more effectually when grafted or inarched on the native species, called, in the west, the cucumber tree, *M. acuminàta.*—*A. J. D.*

The Papaw or Custard Apple (Asímma trilòba, *D. C.* Anòna, *W.* Porcèlia, *Ph.*).—This fine indigenous tree is but too little known or cultivated in the Middle or Eastern States. There is a fine specimen twenty-five or thirty feet high, in the ancient garden of J. Parker, Philadelphia, which has produced fruit for several years (some specimens of which were exhibited before the Pennsylvania Horticultural Society the present season). The tree merits a more general introduction into our ornamental plantations as well on account of its fine, broad, deep-green foliage and pendent purple flowers, as the unique appearance of its curious and not inedible fruit.—*I. B.*

Elsinburgh Grape.—This native variety has perfectly ripened its fruit, owing to the late fine weather, at the country residence of T. Lee, Esq., Brookline. It has never before, in this vicinity arrived at sufficient maturity to test its qualities. We have heard, however, from gentlemen who have tasted the fruit, and who may be considered as the best authority, that it is inferior to no other native grape. Mr. Lee himself has informed us that he prefers it to the Catawba, generally acknowledged as the most superior variety.—*Conds.*

Zinfindal Grape.—This variety, which, we believe is as highly esteemed, by those who have tasted of fine ripened specimens, as the Hamburgh, we have found to possess the excellent and rare quality of keeping until very late in the season. We have at this time (Nov. 25) a fine cluster, weighing nearly a pound, hanging upon the vines in the greenhouse, which has upon it scarcely a single decayed berry. The greenhouse plants have long been in, and the house being situated in a low part of the garden, it is quite damp, especially in wet weather; still, however, this grape has kept its flavor and soundness perfect up to this time. We have no doubt but that, in a good grapery, where nothing else is grown, and the air consequently pure and dry, it would retain its qualities in a high degree, until the month of January. We hope some of our friends will try the experiment, and let us know the result.—*Conds.*

Maclùra aurantiaca.—A memoir has lately been presented to the French Institute, stating that the leaves of this plant are good food for the silk worm, and will be an excellent substitute where the Mòrus multicaùlis cannot be grown. It is known that the Maclùra grows freely, bears fruit, and stands the winter unprotected in the Middle States. We have seen one of the finest specimens this side of its native habitat (the Arkansas) in the nursery of the Messrs. Landreth, Philadelphia. If the leaves should prove to be as nutritive to the silk worm as the mulberry, the Arkansas will reap immense benefits, as the tree abounds throughout the territory, and millions of silk worms might be supplied with food. Would it not be of some importance for those interested in the silk manufacture to try the experiment?—*Ib.*

Chinese Chrysanthemums.—The weather, during the present fall, has been so uncommonly fine, and unaccompanied with severe frosts, that chrysanthemums growing in the open air have produced blossoms in abundance. At the residence of T. Lee, Esq., near Jamaica Pond, they have been surpassingly splendid, and have presented one mass of bloom for several weeks. Indeed, so numerous and large were the flowers, that the plants were almost breaking under their weight. If a judicious selection were made of the earliest flowering sorts, and set in favorable situations, we have no doubt but they would display their rich blossoms long after many of the tender annuals have yielded to the first light frosts.—*Ib.*

Catawba, Isabella, and Bland's Virginia Grapes.—We have lately received (Oct. 31) from the Messrs. Downing, of Newburgh, N. Y., some fine specimens of the above kinds. The Catawbas were far superior to any we ever tasted; Bland's Virginia were not quite ripe, and we doubt whether they will ever perfect their fruit north of Virginia; it is a superior sort and deserves full trial; they were the best we have ever tasted. We have raised some in our garden this season, but not quite equal to those favored us by the Messrs. Downing. The Catawba is, in our estimation (and we are not great lovers of native grapes), entitled to a place in every grapery. Was it but a few days earlier, it would be the richest addition our fruit gardens have received for many years. It should be more generally cultivated.—*Ib.*

Hawthorn Grove, Dorchester.—The splendid green-house which has been here building during the past season, is now nearly completed, and ready for the reception of the plants. It is upwards of eighty feet in length, of proportionate width and height, and is divided into two compartments, one of which will be devoted to hot-house and stove, and the other to green-house plants. Mr. Wilder has considerably increased his collection, and it may now be considered as equal to that of any other amateur of gardening. We hope to have the pleasure of giving our readers an account of a walk through the above in a month or two.—*Ib.*

The Amateur Garden of Mr. S. Sweetser, Cambridgeport, has just received the addition of a new, beautiful and most convenient green-house. It is upwards of thirty feet in length, and is heated with hot water upon the same principle as that adopted at Mr. Cushing's, at Belmont place. It works admirably, and we have no doubt but it will supersede the use of brick flues. We intend to give a plan of this house in a future number, as it is just such a one as many gentlemen would want. That at Hawthorn Grove is also heated in the same manner.—*Ib.*

Pennsylvania Horticultural Society.—The splendid dahlia show of this society took place in Philadelphia, on Monday, the 19th of October last. Premiums had been offered for the best varieties, and also for the finest American seedling. The display, we have been informed, was most magnificent, and elicited great admiration. There was also a profusion of bouquets, green-house plants and culinary vegetables.

The premium for the "best twelve varieties" was awarded to Mr. R. Buist, of the exotic nursery: that for the "best American seedling," to R. Carr. Numerous and splendid specimens were also received from the gardens of H. Pratt, Esq., B. M. Ogden and R. Carr.

The following are the kinds for which Mr. Buist received the premium: King of the whites, Scarlet perfection, Cox's Celestial, Douglas's Criterion, Yellow Turban, Loveley's Earl Gray, alba purpureata, Readii, Springfield Rival, Granta, Cambridge Reform, and Widnall's Rising Sun.

The premium for the best bouquet was given to Mr. Mackenzie, the excellent gardener at Lemon Hill, the residence of H. Pratt, Esq.—*Conds.*

Cleòme grandiflòra.—This splendid annual, the seeds of which we received by the kindness of our friend Dr. Ward, of Athens, Ga., and distributed to several gentlemen in this vicinity, has lately flowered at the garden of Dr. Eustis, in Brookline. The plants were from the garden of T. Lee, Esq., near by, and were taken out of the ground, set in pots, and protected from frost, by placing them in the green-house, where they blossomed. Mr. Lee informs us that it is a splendid plant, and if it could be made to flower in the open ground, in our climate, it would be a truly valuable addition to our annuals. We fear, however, that unless the seeds are sown in February, and the plants forwarded in a hot-bed or green-house, that this will never be the case. Dr. Ward writes us as follows respecting it: "I do not recollect of having seen Cleòme grandiflòra noticed as being in any of your northern collections, nor in the reports of European exhibitions, although, I believe, the plant has been in this part of the country for some years. I received the parent seed of those I send, from Florida, but am ignorant of its native habitat. It is decidedly one of the most, if not *the* most imposing annuals I have ever seen, though in your climate it will blossom late, and require to be kept in pots, and shifted often into larger, and finally finish its career in the green-house. I have now, however, some fine plants come up already [April 14th, 1835,] from self sown seeds, scattered last fall in pots standing near, which I shall attempt to make a display with, in the open air." From this we infer, that it is doubtful about its flowering in the open air in Georgia. We hope, however, that the experiment will be tried the next season, to flower it in our gardens, by sowing the seeds very early. We hope, also, that Dr. Ward will furnish us with an account of the success attending the growth of the plants which were self-sown, and which he expected to blossom this fall; we shall wait anxiously to hear something more respecting its character.—*Ib.*

Messrs. Editors,—As I am a subscriber of your highly useful and interesting Magazine, and read it purposely for information in relation to floriculture, I am induced to ask of you directions for the successful flowering of ranunculuses and anemonies. Please to state particularly what kind of soil they should be set in, as well as the time roots should be set out, and any other items that may occur to you, and much oblige *A Constant Reader. Boston, Nov. 19th,* 1835.

["A Constant Reader" is informed that we intend, in the course of the next volume, to present an article on their cultivation; he will, in the mean time, find good directions appended to a catalogue of bulbous roots stitched in with our last number.—*Conds.*

Taking up the roots of Dahlias.—Your correspondent's (Mr. E. Putnam's) remarks on the taking up of the roots of the dahlia, and their preservation during the winter, is looked for with great interest by *An Amateur.—New Jersey, Oct.* 10, 1835.

ART II. *Massachusetts Horticultural Society.*

Saturday, October 17th.—Exhibited. From R. Manning, Surpasse Virgoulouse, Bezi de Montigny and Saunders's Beurré pears; a seedling pear, raised by J. S. Cabot, Salem. From John Lowell, Downton and Capel pears (mentioned in report of Oct. 3d). From I. P. Davis, Bergamot Sylvange Pears. From Mr. Hunt, Brighton, pears, name unknown. From J. Prince, Urbaniste pears. From J. Lincoln, Hingham, Seek-no-further apples. From J. M. Ives, Salem, Semiana Plums. From J. P. Cushing, Esq. St Michael and Bergamot Sylvange Pears. From D. Adams, Newbury, baking pears. From E. Vose, St. Michael, Tillington, Capiaumont, Urbaniste, Marie Louise, Wilkinson, and Long green pears. From J. Dean, Mansfield, a basket of Apples. From Wm. Oliver, Wilkinson pears. From Messrs. Winship, Hybrid Walnuts (raised from the English walnut impregnated with the butternut), the tree received from Gorham Parsons, Esq. The Messrs. Winship will supply any persons with scions.

Oct 24th.—Exhibited. From John Heard, Marie Louise and Belmont pears (the latter a variety sent to Mr. Lowell by Mr. Knight. The committee were in some doubt about the correctness of the name, some believing it to be the Duchesse d'Angouleme). From Henry Cushing, Hingham, Hinkley pears. From W. Kenrick, Beurré d'Aremberg, Passe Colmar, Beurré Diel, Glout Morceau, and Burnet pears (a native,and very good). Orange sweeting apples, received from Mr. Leland of Sherburne; (said to be beautiful, sweet and fine.) From S. P. Gardener, Brown Beurré pears. From J. P. Cushing, Esq., several kinds of pears, the names mostly unknown. From E. Vose, Sylvange Verte, Wilkinson, Marie Louise and Urbaniste pears. From Madame Dix Dix pears. From R. Manning, Beurré Colmar d'Automme, Beurré Van Marum, Frederick of Prussia, Princess of Orange, Henry IV., Wilkinson, and Pope's scarlet major pears; Creesy, Marquis, Kilham Hill and Minister apples. From B. V. French, Alfriston, Bourassa and Fameuse apples; Tillington Pears. From James Collier, Cohasset, seedling sweet apples.

Nov. 7th.—Exhibited. From the Hon. John Lowell, Tasseled yellow, Superb clustered yellow, Golden Lotus flowered, Changeable pink, Buff, Expanded light purple and Quilled White Chrysanthemums; Double white Camellia flower. From R. L. Emmons, the Rose of Jericho, (Anastática hierochúntina). From S. Downer, Forelle and other pears. From Bezaleal Taft, Jr., Uxbridge, Tift's sweeting apples. From R. Manning, Messire Jean, Beurré Diel and Coffin's Virgoulouse pears; Red Doctor or De Witt, Haskell's sweet (fine) and orange or lime apples. From the Botanic garden and nursery of C. & A. J. Downing, Newburgh, N. Y., presented by the Messrs. Hovey, Catawba, Isabella and Bland's Virginia grapes: the finest specimens, particularly of Catawbas ever exhibited before the Society. From the Hon. John Lowell, two or three kinds of pears. From Gorham Parsons, Esq. La Bonne Malinoise pears. From R. Cheney, Manchester, Common apples, the names unknown.

November 14th.—Exhibited. From Messrs. Hovey, thirty varieties of Chinese Chrysanthemums, as follows: Spanish Brown, Small deep Yellow, the Buff, the Rose, or pink, Changeable pink, Incurving Lilac, Quilled pink, The superb white, The sulphur yellow, The two-colored red, The clustered pink, The early blush, Golden Bronze-back, The superb clustered yellow, The golden lotus flowered, Starry changeable purple, The late purple, The Brown purple, The tasseled flame yellow, The tasseled yellow, The tasseled lilac, The tasseled purple, The narrow Quilled white, The great tasseled white, Half-double quilled white, Half-double bronze-buff and Daisy flowered. According to Mr. Haworth's arrangement, at p. 141, except the Daisy flowered.

From S. Downer, Lewis, Beurré Diel, Bezi Vaet and Beurré d'Aremberg pears. From L. P. Grosvenor, Pound Royal pears; pippins and Spitzemberg apples. From Wm. Oliver, Doctor or De Witt apples. From S. P. Gardener, Esq., Boston, Brown Beurré pears. From R. Manning, Spanish Bon Chrétien, Passe Colmar, Burgermeester and the Beurré Romaine (so supposed, but not correct), pears; Fall Harvey apples. From Messrs. Hovey, a native apple, received from R. Kittredge, Esq., Portsmouth, the original tree growing in Tewksbury; the committee pronounced it a valuable variety. From D. Fisk, Worcester, a basket of handsome apples; a native kind, and worth cultivating. From M. H. Ruggles, Fall River, pears, accompanied with a letter, in which the fruit is stated to be a *wilding;* the tree being now forty years old, fifteen feet high, and the trunk five or six inches in diameter: it is a great bearer, four and a half bushels having been taken from the tree this season; it is supposed that it will keep till Christmas: Mr. Ruggles suggests that it should be called the *Durfee* pear, the tree having grown on the farm of Mr. George Durfee, in Tiverton, R. I.

Art. III. *New York Horticultural Society.*

The following is the Report of the inspecting committee on the exhibition of dahlias, held by that society, on the 8th of September last, which has been kindly favored us by Mr. Hogg, the Secretary:—

Agreeably to the rules and regulations adopted at a meeting of the Society, held at its rooms on Tuesday, the 8th of September last, the Committee proceeded to discharge the duty assigned it, of awarding the different premiums for dahlias to the different proprietors for prizes, and after a strict, careful, and impartial examination, decided on the following distribution thereof, viz:—

The first premium for the best six self-colored seedling dahlias, is awarded to the number designated by the Committee of Arrangements as No. 5, and was presented by Mr. Thomas Dunlap.

No second premium is awarded, no person having three variegated seedlings in conformity with the requirements of the rules.

The third premium for the greatest and best variety of seedling dahlias, is awarded to the number designated by the Committee of Arrangements as No. 6, and was presented by Mr. Wm. Reid.

The fourth premium for the best twelve self-colored imported dahlias is awarded to the number designated by the Committee of Arrangements as No. 2, and was presented by Mr. Wm. Reid.

The fifth premium for the best six variegated imported Dahlias, is awarded to the number designated by the said Committee as No. 5, presented by Mr. Thomas Dunlap.

The sixth premium for the greatest and best variety of imported dahlias, is awarded to the number designated by the said Committee as No. 5, presented by Mr. Thomas Dunlap.

Although the flowers presented at this year's exhibition were, in point of beauty and variety, (in the opinion of the Committee) vastly superior to those produced at any former exhibition, the number of competitors in prize flowers was comparatively few. Notwithstanding that the season was not as propitious for the bloom of dahlias as it might have been, (in consequence of the continued drought), still it is difficult to conceive that a more splendid and beautiful display of this chaste and gorgeous production of Flora could have been produced under the most favorable auspices.

Contributions of dahlias were received from the following gentlemen, viz;—Messrs. Thomas. Hogg, Michael Floy & Son, Alexander Smith, Noe & Boll, Andrew Hyslop, Thomas Bridgeman, Gilbert Davis, J. Hitchcock, J. K. Hamilton, Dr. McVicker, Aaron Arnold, E. Panton, Dr. Guilford, J. M. Catlin, Wm. Neale, J. Thorburn, J. G. King, Dr. Pennell, James Martin, Wm. Prince & Sons, J. Hoyt and J. Brown, Jr., of New York and its neighborhood; and also from Messrs. R. Buist, R. Carr, Dryburgh & Sherwood, Henry Pratt, B. M. Ogdon, Alex. Parker, —. Hobsen and Anthony Felton, of Philadelphia; Daniel McAvoy, of Bristol, and Mr. David Allen, of Burlington, New Jersey, who sent some Beurré and Virgoulouse pears. To the above named gentlemen, the Society tender their sincere thanks, for their kindness and liberality, in sending such a great variety of splendid flowers, as rendered the late exhibition unprecedented in this country for beauty and gorgeous display.

None of the seedlings were named.

Mr. Wm. Reid's twelve self-colored imported dahlias were as follows, viz:—Groombridge's Matchless, Countess of Liverpool, Granta, Springfield Rival, King of the whites, Rose d'Amour, Widnall's Perfection, Hall's Palmyra. Neptune, Barrett's William the 4th, Surpasse Triumph Royal, and Widnal's Diana.

Mr. Thomas Dunlap's six variegated imported dahlias were as follows, viz: Alba delineata, Readii,Lucy, Queen of the dahlias, Widnall's Enchantress, and Louisa.

Mr. Thos. Dunlap's greatest and best variety of imported dahlias were as follows: Jason, Surpasse Donna Maria, Lucy, Rosabella, Golden Yellow, Lord Derby, Paroquet, Felgate's Negro, Captain Ross, Picta formosisisma, Chelsea Fair, Erecta, National Guest, Achilles, Aurea, Salamander, Nigra Superba, Golden Yellow (from London), Countess of Liverpool, Julia, Miss Wood, Paper white, Neptune, Scarlet Ranunculus, Groombridge's Matchless, Dennisii, King of Yellows, Linn's fine Stripe, Alba delineata, Queen of Belgium, Roscoe, Royal Lilac, Agrippina, Mrs. Talbot, Blush Lilac, Harding's Black Prince, Transcendenta, Queen of Dahlias, Pavonia, Aurantia speciosa, Colvill's Perfecta, Anne Boleyn, New Crimson Globe, Alba fimbriata, Plutus, Jaune Insurmountable, Man of Kent, Rose Striped, Lady Grey, Boll's Yellow, Prince of Orange, Letitia, Queen of Wirtemburg, Pygmea, Alba purpureata, Douglas's Augusta, Rafanesque, Fair Devonian, Dunlap's Golden Yellow, Major Downing, Nymphæflora, Betsy, Daniel Webster. Dawson's Victory, Tenebrosa linea, Russell's Maculatum, Lord John Russell, Aurora, Pizarro, La Brilliante, Miss Pelham, Coccinea Perfecta, Rosetta, Barrett's William the 4th, Purpurea variegata, French white, Quilled Scarlet Globe, Springfield Rival, Landgravine, Lord Brougham, Theodore, Levick's Commander-in-Chief, Noblesse, Madame de Witt, Readii, Imperiosa, Prince George of Cumberland, Ranunculiflora, Diana, Metropolitan,Maid of St. Leonard's, Negro Boy, Coccinea speciosissima, Fanny Kemble, Lord Althorpe, Surpasse Triumph Royal, Fulgida Perfecta, Niobe, Rose d'Amour, Widnall's Enchantress, Queen Bess, New Yellow, Bellona, Sulphurea perfecta, Louisa, Coccinea Multiflora, Widnall's Emily, Lady Grantham, Granta, Excellent Rose, Miller's Defiance, King of Roses, Duchess of Bedford; in all 114 varieties.—*Yours, respectfully, J. Hogg, Nov.* 11, 1835.

Art. IV. *Quincy Market.*

Roots, Tubers, &c.	From $ cts.	To $ cts.
Potatoes:		
Common, per barrel,	1 00	1 25
per bushel,	30	87½
Chenangoes, per barrel,	1 25	1 50
per bushel,	33	50
Eastport, per barrel,	1 50	2 00
per bushel,	1 00	
Sweet Potatoes, per bushel,	1 75	2 00
Turnips:		
Common, per barrel,	75	1 00
per bushel,	25	37½
Yellow French, per barrel,	1 00	1 25
Onions:		
Common, per barrel,	1 75	2 00
per bushel,	67	83
per bunch,	3	4
White, per bunch,	6	
Beets, per bushel,	50	75
Carrots, per bushel,	50	75
Parsnips, per bushel,	75	
Salsify, per bunch,	12½	
Horseradish, per pound,	10	12½
Shallots, per pound,	20	
Garlic, per pound,	14	
Cabbages, Salads, &c.		
Cabbages: per dozen.		
Savoys,	50	75
Drumhead,	50	75
Red,	50	75
Brocoli, each,	25	50
Cauliflower, each,	25	50
Celery, per root,	8	12
Lettuce, per head,	6	8
Squashes and Pumpkins.		
Canada crookneck, per cwt..	2 00	
Common crookneck, per cwt..	1 00	
Pumpkins, each,	10	20

Pot and Sweet Herbs.	From $ cts.	To $ cts.
Parsley, per half peck,	37½	
Sage, per pound,	17	20
Marjoram, per bunch,	6	12½
Savory,	6	12½
Spearmint,	6	
Fruits.		
Apples, dessert:		
Common, per barrel,	1 25	1 50
per bushel,	50	62½
Baldwin, per barrel,	1 50	2 00
per bushel,	75	1 00
Russetts, per barrel,	1 50	2 00
per bushel,	75	90
Pears:		
St. Germain, per dozen,	50	1 00
Crasanne, per dozen,	25	50
Winter, per barrel,	3 50	
per bushel,	1 50	
St. Michael, per dozen,	none.	
Quinces, per bushel,	3 00	4 00
Pine Apples,	25	50
Grapes:		
Black Hamburgh, per pound,	50	75
White Sweetwater, per lb..	25	
Malaga, per pound,	37½	50
Isabellas, per pound,	none.	
Barberries, per bushel,	1 00	
Cranberries, per barrel,	6 00	7 00
—— per bushel,	2 00	2 50
Oranges, per box,	5 00	7 00
per dozen,	37½	62½
Lemons, per box,	4 00	5 00
per hundred,	1 50	2 00
Chestnuts, per barrel,	8 50	
per bushel,	2 50	3 00
Walnuts, per barrel,	5 00	
per bushel,	2 00	
Almonds, per pound,	12	14
Filberts, per pound,	4	6

Remarks. The prices of most of the various productions for the market, particularly those staple articles, have advanced a shade since our last report; business appears lively, and sales are quite brisk; considerable large sales are made for shipping; every thing seems to assume a more stirring aspect. Potatoes remain nearly the same as in our last; are, perhaps, a little more plenty; considerable quantities have arrived from Nova Scotia; very few Eastport, prime quality, have arrived, and consequently, those on hand, command a good price. Sweet, are nearly all gone; those remaining, are held at quotations. Turnips are plenty, very sweet, of exceedingly fine size, better, we may say, than they have been for the past two or three years; this is owing to the late fine warm weather, during which time they made a very rapid growth; good crops have been gathered from seed sown as late as September. Onions have advanced in price, and are getting rather scarce. Parsnips are large, fine, and plenty. Very little salsify to be had. Sales of cabbages have been large, and prices are much higher; it has been difficult to supply the demand. Some most excellent brocoli and cauliflowers are now brought in; prices have advanced. Celery is plenty, and quality fine Canada squashes are not very plentiful; common crookneck may be had in abundance. Apples have advanced in price; fine Baldwins and russets selling well at quotations; owing to the great crop, they are not of large size this season. Of pears of fine kinds, there are none in market, now, except St. Germain's and Crasannes: these sell quickly. The St. Germain's are from gardens in the city; they have long ceased to be worth cultivating in the interior. Grapes are scarce, except the Malaga. Cranberries are very scarce, and prices uncommonly high; the quality, however, is excellent. Chestnuts are small, and of indifferent quality.

Boston, Nov. 21. Yours, M. T.

Art. V. *Obituary.*

Death of Mr. Drummond.—We have just received the sad news of the death of the well known botanical traveller, Mr. Drummond. He had crossed from Texas to the peninsula of Florida, with the intention of exploring the botanical riches of that country; but, finding the season unfavorable, he sailed over to Havana, Cuba, intending to spend a short time there, but died soon after his arrival. Thus the botanical and horticultural world have lost, in a short period, two of the most valuable contributors,—Mr. Douglas, whose indefatigable exertions have enriched the gardens of Europe and America with so many rare, interesting, and beautiful species of plants from California and our North-West Coast, and Mr. Drummond, whom your botanical readers will recollect as the naturalist in Sir John Franklin's overland expedition, and whose collections in British America were extremely valuable. More recently he had explored the Southern States, where, we believe, he amassed a collection of upwards of a thousand species of plants. After this, he spent a year and a half in Texas, adding to his collection, and was anticipating an interesting and profitable tour through Florida, when he met with his untimely fate.—*A. J. D., Newburgh, N. Y., Oct.* 30*th.*

Art. VI. *Meteorological Notices.*

FOR OCTOBER.

The month of October was unusually fine, and accompanied with but few frosts, and those very light. Vegetation continued in all its vigor throughout the month. There were a few days of foggy weather.

Thermometer.—Mean temperature, 49° 20′—highest 72°; lowest 30° above zero.

Winds.—N. two days—N.E. one day—E. five—S.E. three—S. six—S. W. eight—W. four—N. W. two days.

Force of the Wind.—Brisk, twelve days—light, nineteen days.

Character of the Weather.—Fine, thirteen days—Fair, twelve—Cloudy, six.

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